REFORMS IN ELECTRICITY SECTOR AND THEIR IMPACT ON CONSUMER PROTECTION

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INTRODUCTION

Since the late-1980s technological progress and a changing political and corporate climate have profoundly affected traditional views on public electricity supply. Emphasis has been placed on achieving greater efficiency in electricity supply at lower prices by introducing competition in market segments, such as generation and deliveries to end-users. At the same time however, features such as redundant and expensive infrastructure and the need for a high level of coordination among market players required the introduction of proper regulation. Further regulation was required to achieve non-economic objectives of the government such as the provision of universal services to all consumers, equal prices across geographical regions, and ensuring security of supply.

Bulgaria does not remain outside the world tendency of changes in the electricity sector. The aim of the ongoing restructuring in the sector is, by replacing state administration with regulation and, in some instances, with market competition to contribute to the improvement of the competitiveness of the national economy as well as to guarantee a secure supply to the population. The reforms must contribute as well to Bulgaria's efforts to join the European Union (EU) and respectively the EU requirements should serve as a guiding light for decisions of the Bulgaria's administration. Furthermore, as the EU Members have already made some or even significant progress in the restructuring of their electricity markets and industries, their experience has to guide Bulgaria's ongoing reforms.

Reforms in the electricity sector raise the question about their social affordability. The topic of households as part of the electricity market often remained outside the general discussion for the development of the sector in Bulgaria during the last years. Accounting for 40% of domestic electricity consumption, households pose one of the

most important challenges to the transition from a state-administered to a regulated energy sector: how the normal market logic to be combined with the social interests of households.

Taking into consideration the challenges to the Bulgarian electricity sector, the Center for Economic Development (CED) in collaboration with the Institute of Energy Economics (EWI) at the University of Cologne and with the financial support of Phare Access Programme 1999 of the Delegation of the European Commission have analyzed the status and perspectives to consumer protection during the reforms. The goal of this book is, by presenting the results of our research, to outline both opportunities and threats to the social affordability of the reforms in the sector.

The analysis has been prepared on the basis of expert assessments, comparative analysis and sociological studies. Statistical and factual data from national and international organizations are used as primary information. In order to present more completely and precisely the challenges to the social affordability of the reforms, CED with the assistance of Vitosha Research conducted a nationwide, representative survey of Bulgarian perceptions and expectations for electricity prices and quality.

Under normal conditions, the protection of electricity consumers is ensured by the mutual influence of three factors. The first is competition in the marketplace that forces suppliers to offer better price and quality to consumers. The second is the regulation of electricity suppliers with the aim to ensure security and quality of supply to all consumers at reasonable prices. The third is the influence of consumer organizations that communicate and defend the interests of those whom they represent to regulatory bodies and suppliers.

This study focuses on the interplay of these three factors in Bulgaria. Given that competition in the electricity market is unknown in Bulgaria, our emphasis is on the ongoing restructuring of the marker organization and corporate property. The capacity of the regulatory body in the sector - State Energy Regulatory Commission - and of consumer associations to protect the interests of household electricity consumers is analyzed as well.

In order to improve the knowledge of Bulgarian institutions, corporations, and society of the requirements and practice in the European Union with regard to consumer

protection in deregulated energy markets, special attention is paid to the common EU policy in this area as well as to the experience of Sweden, Finland, Germany and the United Kingdom. The selection of the countries is not random but is based on their achievement of full liberalization in their energy sectors.

THEORETICAL ASPECTS OF PROTECTION OF ELECTRICITY CONSUMERS

1. Definition of Consumer Protection

Consumer protection is not a precisely defined term. Recently a general understanding has developed that it comprises four major consumer interests[1]: (1) health, (2) safety, (3) economic interests, and (4) the right of consumers to be supplied with information and education and to organize themselves in order to safeguard their interests.[2]

In this study, we will focus exclusively on the consumer protection with regard to economic interests of households, their right to information and education and their right to organize themselves in order to safeguard their interests. Economic interests of consumers include their financial interests and their legal and practical autonomy in the formation of their relations to their market counterparts.

2. Concepts of Consumer Protection in a Market Economy

In economic theory, consumer protection policies are based on different concepts, of which the most important are:

- The concept of free markets with functioning competition (neo-classical concept);
- The liberal model of competition and information;
- The concept of counter-force.

The neo-classical economic theory (especially in its interpretation by the Chicago School of Economics) argues that a well functioning competition alone is sufficient for protecting the rights of market participants, both producers and consumers. Similarly, within *the*

[1] See the EU-Treaty as amended by the Treaty of Amsterdam, Article 153 (ex Article 129a).
[2] The consumers' right to organise themselves in order to safeguard their interest was newly added in the EU-Treaty in 1997.

neo-liberal economic theory of the Freiburg School of Economics, consumer sovereignty is considered sufficient and renders consumer protection policies unnecessary. The main objection to these theories is that they postulate perfect competition including the presumption of perfect information being available to all market participants. As recognition has grown of the absence of these conditions, consumer protection policies and theories have been developed.

One of these concepts is *the liberal model of competition and information*, which argues that the number and complexity of goods available in today's marketplace, combined with asymmetric information flows, necessitates a specific consumer policy as part of the general competition policy. Proponents of this theory favour the provision of information to consumers (for example, via publicly financed consumer education or product testing) as a main instrument of the consumer protection policy.

During the 1970s the so-called *concept of counter-force* was developed. It argues that consumer protection policy is independent of, and on the same footing as competition policy. The development of this theory reflects the belief that the liberal model of competition and information was inadequate to protect the interests of consumers. Within the counter-force theory, means of protecting the latter include support of consumer organizations, regular provision of information and education to consumers, and stronger legal consumer protection.

Both the liberal model of competition and information and the concept of counter-force were developed as reactions to the evidence of information asymmetries and the need for external intervention into the marketplace. These concepts have each become established in different national policies to varying degrees.

3. Consumer Protection in a Monopolistic Market

In a monopolistic market, consumers are served by mostly integrated utilities with a government-granted franchise area, in which they are the sole, monopoly distributor and supplier of electricity. In Europe a wide range of industry structures have been observed. In France for example, a single state-owned, fully-integrated utility (Electricité de France) served most customers[3] . By contrast, in Germany up to 1000 public, mixed public and private, and private fully or partly integrated utilities, each with its exclusive

[3] In addition, there are several smaller suppliers with a negligible combined market share.

monopoly area operated.

In a monopolistic market, consumers cannot select among different suppliers but have to contract with the incumbent franchise area supplier. The rights and obligations of electricity supply companies and consumers are specified either in general terms of trade applicable to all businesses regardless of their scope of work, or in electric utility specific terms of trade.

In a monopolistic market, tariffs for electricity consumption are differentiated only to a small extent. Tariff structures and levels are regulated and usually amended on a recurrent basis with the approval of a regulatory body. Regulation mostly take place on a *cost-plus* basis which grants utilities a reasonable rate-of-return for their investments, and makes price risks for consumers very small. Usually, several tasks that are considered public service obligations (such as supporting renewable energy sources or energy efficiency measures) are tied to tariff regulation.

Obviously, regulation of monopoly electric utilities is the major instrument used to protect consumers in a monopolistic market.

4. Effects of Liberalization for Consumers

The value-added chain of electricity supply consists of a number of distinct functions. In the order of vertical stages we identify electricity generation (including the provision of ancillary services), dispatch/settlement, system control, electricity transmission (including system control), wholesale trade, distribution, and retail supply. Across all levels of the vertical supply chain we find activities of metering and risk management. Liberalization may take place along most of the steps in the electricity value-added chain.

Whereas in most European countries generation and wholesale supply markets are open effectively for most consumers, retail markets are liberalized to a different extent. In Norway, Sweden, Finland, England, Austria, and Germany all customers are currently able to choose their supplier. Households in Denmark and the Netherlands will have similar rights in 2003, while other European countries have not yet decided, whether to fully open their markets (see Table 1).

Table 1: Electricity Market Opening in Selected European Countries

Country	Time	Eligibility (Max. yearly demand-threshold)	Legal degree of market opening: Eligible customers' share of domestic consumption
England & Wales	April 1990 April 1994 Sept. 1998 - May 1999	> 1MW > 100 kW All	30 48 100
Germany	April 1998 2000	All Introduction of load-profiling	100
Sweden	January 1996 November 1999	All, hourly metering required Abolishment of hourly meter requirement	100
Finland	January 1995 January 1997 November 1998	> 500 kW All, hourly metering required Abolishment of hourly meter requirement	57 100
France	February 2000 January 2001 January 2003	> 40 GWh > 16 GWh > 9 GWh Full liberalisation not yet decided	30 35 38
Spain	January 1999 July 2000 January 2003	> 5 GWh > 1 GWh All	32 54 100
Norway	January 1991	All	100
Denmark	January 1998 April 2000 December 2000 January 2003	≥ 100 GWh ≥ 10 GWh ≥ 1 GWh All	 90 100
Austria	February 1999 February 2000 October 2001	≥ 40 GWh ≥ 20 GWh All	 100
Italy	March 1999 January 2000 January 2002	≥ 30 GWh ≥ 20 GWh ≥ 90 GWh Full liberalisation not yet decided	30 35 40
Belgium	July 2000 January 2001 January 2003 January 2006	≥ 20 GWh ≥ 10 GWh ≥ 1 GWh All	35 52 100

Table 1: Electricity Market Opening in Selected European Countries (Continuated)

Country	Time	Eligibility (Max. yearly demand-threshold)	Legal degree of market opening Eligible customers' share of domestic consumption
Greece	February 2001	≥ 100 GWh Full liberalisation not yet decided	34
Ireland	February 2000 January 2003	≥ 4 GWh n.a.	28 32
Portugal	1995 February 1999 2002	≥ 100 GWh ≥ 9 GWh > 1 kV	 30 49

Source: *Eurelectric*, Implementation of the Internal Electricity Market Directive in the EU Member States, *Brussels, June 2002; EU*, First benchmarking report on the implementation of the internal electricity and gas market, *Commission Staff Working Paper, SEC (2001)1957, Brussels, March 2002*, own calculations of EWI

Apart from the legal conditions necessary for opening a market, other practical and economic conditions have to be fulfilled for a well functioning competition to exist for the household sector. Transaction costs for the change of the supplier, for instance, must not be prohibitive. Specific meter requirements resulting in excessive metering costs have to be avoided as well. As a means to foster competition in the household sector, metering may be based on load profiling, which renders expensive meters unnecessary.

When the electricity market is not opened to households, the franchise monopoly incumbent remains the sole supplier. Tariffs for non-eligible customers or those that do not change their supplier and choose to stick to their former tariff contract remain regulated. However, the responsibility for tariff regulation may be shifted from the government to a different institution, for example, to an independent regulatory body.

In theory, there is no consensus regarding the advantages of full market opening. Newberry, for example, argues that there may be considerable advantages in retaining a franchise monopoly for smaller customers. These include: [4]

- A monopoly supplier will be a viable counterpart for medium to long-term

[4] Newberry, D.M., *Issues and Options for Restructuring the ESI*, Information Paper, October 11, 2001, available at http://www.econ.cam.ac.uk/dae/people/newbery/output.htm

contracts.

- Provided that final tariffs are well regulated, contracting costs may be reduced without sacrificing the benefits of competition.

Joskow[5] argues that benefits of full market opening depend on the existence of competitive wholesale markets, retailing costs associated with marketing and billing for electricity, customer switching costs, and the intensity of competition among retailers.

A total opening of the retail market should be based on a careful cost-benefit analysis of lower prices, reduced cross-subsidies, and greater consumer-orientation, compared to the extra costs, which may easily overcompensate the benefits. Joskow adds that "*overall, it is not at all obvious to me that smaller customers reap any net social gain from retail competition without real-time meters compared with a regime where they are given direct access to the competitive wholesale market by their UDCs [utility distribution companies].*"[6] . In addition, he points to the large advertising, marketing, and billing costs that competing sellers will likely pass on to consumers, further reducing the chances of the latter reaping any net savings from the reforms.

In order to consider all of the effects of an open market on consumers, we will assume in the following that even households have free access to the market, though some of the effects of liberalization may appear even if the market is not fully opened.

In a fully opened market households are granted *a free choice of supplier*. Whereas under monopoly conditions, there is only one supplier available, in a liberalized market consumers may select a supplier according to individual preferences. However, the choice is restricted to the suppliers competing on the relevant residential market. In order to make this choice, consumers either inform themselves or are informed about their options by a third party.

With the opening of the electricity market, consumers are inevitably faced with *price and delivery risks*. The extent to which consumers are exposed to the former depends on the contract they negotiate with their supplier. With liberalization, prices on the wholesale electricity market become more volatile. The increased volatility is either directly passed on to consumer prices or taken into account through risk premiums.

[5] Joskow, P.L., *Deregulation and Regulatory Reform in the U.S. Electric Power Sector*; in: Peltzman, S., Winston, C. (eds.): *Deregulation of Network Industries - What´s Next?:* Washington, D.C, 2000, p.176

[6] Joskow, P.L., *Deregulation and Regulatory Reform in the U.S. Electric Power Sector*; in: Peltzman, S., Winston, C. (eds.): *Deregulation of Network Industries - What´s Next?:* Washington, D.C: 113-189, 2000, p.181

Delivery risks include the possibility that the chosen supplier bankrupts or fails to deliver for other reasons. In general, buyers assume the risk of non-delivery and may ultimately turn to the court in case of non-delivery. As electricity is often considered to be an essential good, there are several instruments to protect the customer against this risk of non-delivery.

One of the aims of the energy market liberalization is *to increase efficiency within the industry*. Increased efficiency means reduced costs per unit of output. If competition is working effectively, reduced costs should lead to lower electricity prices.

From the viewpoint of households, two price effects that have an *impact on the disposable* income have to be distinguished:

- *direct price effects*: lower electricity prices reduce household electricity bills and a portion of income is set free to be spent on other goods and services;
- *indirect price effects*: due to lower electricity prices for industry costs (and prices) of other goods and services decrease and disposable income increases again.

5. Consumer Protection and Social Policy

Consumer protection affects all major fields of government policy. In some countries, in the United Kingdom in particular, current electricity market policies contain provisions aimed at a wide range of social issues such as fuel poverty[7] , helping disabled or indebted customers, etc.

Electricity suppliers incur costs to meet social obligations such as offering special rates or services for disfavored consumer groups. They often pass these costs on to consumers and if, for example, due to fierce competition they do not succeed in doing it, their profits shrink. Thus, the financing of social obligations is secured either by customers or by the shareholders of electricity supply companies. For consumers that cannot choose among suppliers and have regulated prices, it is up to the regulator to decide to which degree these social costs may be passed on to the regulated consumer groups.

Issues such as fuel poverty and support to disabled, low-income and indebted

[7] Fuel poverty is a situation whereby households are not able to meet their electricity supply expenses or these expenses constitute a large share of their income

consumers are often considered to be essential elements of the social policy. Usually, core social tasks are at least partly financed by the budget and thus by taxpayers.

The problems of low-income, disabled or indebted electricity consumers mostly find their reasons in low dispensable incomes or physical or mental deficiencies of the consumers. Mostly they are not electricity specific as they apply to other goods and services as well. As a consequence one could argue that it is not the task of other electricity customers to finance the social tasks rather than of the society as a whole. Thus, one of the possible solutions to overcoming fuel poverty is not to oblige electricity suppliers to offer lower rates for certain consumer groups but rather to provide them with vouchers[8], with which the respective consumers will pay their electricity bills at the price for all consumers. The electricity supply companies will be reimbursed for the vouchers by the general budget.

6. Instruments for Consumer Protection

Within consumer protection policy, we can distinguish three main fields:

- Representation of consumer interests;
- Obligations to electricity supply companies to protect the economic interests of consumers;
- Dissemination of information to consumers and their education.

Representation of Consumer Interests

Consumer interests can either be formally or informally taken into account in *the process of legal or regulatory decision-making*.

Formally, the law governing the electricity market may demand the introduction of an official, electricity specific consumer agency or committee (such as Energywatch in the United Kingdom), or an ombudsman that serve as representatives of consumer interests. These institutions may gain the right to a share in decisions or to be heard before decisions are taken. This right may refer to legislative decisions or decisions taken by a regulator. If the law does not require the creation of an official consumer agency, it may provide general consumer associations or other non-governmental

[8] Cash payments bear the risk that the money is used for other items rather than for the payment of the electricity bills.

organizations with the right to take part in the decision-making process where electricity market regulation is affected.

Formal procedures for consumer participation in decision-making processes comprise public hearings and the release of discussion/consultation documents. Consumer representatives may write comments and make suggestions to consultation papers issued by regulators or legal decision makers or take part in public hearings.

If general laws or electricity specific laws do not create a right for consumer protection associations to take part in decisions, the latter may nevertheless act informally, for example, through lobbying activities.

Because electricity supply companies are market actors such as electricity consumers, there should be no special rights for consumers to take part in the business decisions of the former. Companies may however let consumer representatives participate in their business decisions.

Usually, consumer associations are not allowed to represent individual consumers in *courts*. However, in some countries, as is the case in Germany and Sweden, they have the right to bring cases of general interest before the court. Consumer associations may as well provide electricity consumers with information on lawyers or legal advisors who are specialized in electricity cases.

Provisions to Protect Economic Interests of Consumers

A genuinely competitive marketplace is crucial to the effective protection of economic interests of consumers. A prerequisite for proper competition is that consumers be granted access to the grid on an objective, transparent, non-discriminatory basis. In addition, regulators and/or cartel authorities must supervise the behaviour of market participants and take action if companies distort or hinder competition. Apart from these general provisions, several specific instruments for consumer protection have been made available in various countries:

- Obligation to connect and supply (supplier of last resort);
- Service quality standards and compensation schemes;

- General terms and conditions for connecting to the grid and for electricity supply;
- Complaints management.

These provisions can be codified in a law, ordinances, decrees, and/or licenses[9] for distribution and supply companies, such as occurs in the United Kingdom. Economically equivalent would be to make the provisions part of the general terms and conditions, which in return would form an integral part of the license. This option exists, for instance, in Germany, where a federal decree defines the minimum requirements for general terms and conditions of electricity distribution and supply companies. The different forms of codification usually give consumers different opportunities to act, if they consider a specific action of a supplier a breach of the provisions.

Even in a completely deregulated energy market, all consumers must be *connected to the grid* to receive electric services. As the grid operation is a monopoly function, there is a danger the distribution network company to refuse to connect e.g. households in sparsely populated areas in which connection costs are high. Therefore, in order to enable all households to gain access to electricity supply, distribution network operators should be obliged to connect all households wishing so.

As in the case of connection to the distribution grid, suppliers might refuse to *supply electricity* to specific consumer groups (e.g. low-income consumers), which results in higher costs. Therefore, in addition to the obligation for distribution companies to connect all households wishing so, public electricity suppliers should be obliged to supply electricity to standard final household customers seeking supply based on general terms and conditions and tariffs.

This obligation should not be placed on all electricity suppliers (for example, on producers that generate electricity for their own use) rather than on the incumbent public electricity supplier. The latter would often have been the only regional distribution and supply company before the market opening and may continue to enjoy a quasi-monopoly situation even after the liberalization. If the market is completely opened, the obligation to supply makes the incumbent a supplier of last resort, i.e., if a household has chosen a new supplier, which however is unable to supply (e.g., due to bankruptcy) the old incumbent will be the default supplier.

[9] Either there is a combined distribution and supply license or the distribution and supply require separate licenses.

Distribution and supply of electricity should be based on general terms and conditions, which must be published. In general, such conditions require a uniform tariff for households throughout the area for which the public electricity supply company is responsible. Tariff uniformity is mostly required to provide similar economic conditions within the area.

The requirement for tariff uniformity has remained largely unchanged after liberalization. One problem with uniform tariffs, however, is that they do not always reflect costs accurately. Cost differences within a region are often based on different grid costs, not on different supply costs. Therefore, it is not necessary to require uniform supply tariffs. The regulation of transmission and distribution tariffs is sufficient to balance network costs among network users.

The provision of similar economic conditions within a region may be considered a social task. As such, it may be argued that it is the responsibility of the public purse rather than of the average electricity customer to ensure uniform tariffs throughout a network.

The obligation to connect and supply should be constrained and imposed only if the associated costs are economically reasonable. "Economically reasonable" cannot be given a precise, abstract definition. The definition is case dependent but inevitably should include a system-wide analysis of costs and revenues.

No general agreement exists regarding whether customers' poor creditworthiness or insolvency should be considered in determining whether connection and supply are not economically feasible. However, it is indisputable that electricity theft or non-payments of electricity bills create costs that are absorbed by all customers. That is why, *electricity suppliers should be given the right to cut off supply* to customers who have either been convicted of electricity theft or not paid their electricity bills for a specified time period. The right to cut off these customers from the grid protects the average consumer from paying for costs caused by fraud or non-payment.

Electricity companies are responsible for providing a reliable electricity supply. *Specific quality standards* should be included in their licenses as well as in the general conditions for electricity distribution and supply. These service quality standards should include:

- The maximum acceptable number and duration of supply interruptions;
- The frequency and voltage stability that must be maintained;
- The time period within which delivery shall be restored after supply interruptions;
- The minimum notification term in case of planned supply interruptions;
- The minimum notification term for planned meter readings or access to private properties for other specified reasons (repair of technical equipment for instance);
- The maximum time period within which a company must reply to a customer's complaint.

Unforeseen supply interruptions and further breaches of these service quality standards may result in physical and financial damages to households (damage to electronic equipment due to high frequency deviations, for example). Companies must be given the responsibility of compensating customers for the incurred costs. Sufficient compensation payments should be encoded in the general terms and conditions. Two preconditions should be fulfilled for compensation claims to become eligible: (1) the damage must be provable, and (2) the company must be shown to have caused the damage.

Compensation payments should cover all damages that have been caused. However, the assessment of the damage itself may create high transaction costs (for instance, costs for visits at customer' side or for legal proceedings, in case of disagreement of the company). This provides reasons for introducing general compensation schemes in case of minor damages that are embodied in the general terms and conditions (for example, a lump-sum compensation if a supply interruption lasts longer than a specified period).

In order to provide incentives for companies to fulfill and even to surpass minimum requirements for service quality, distribution and supply tariff regulations should contain mechanisms which enable companies to retain a certain profit if service quality standards are surpassed.

Purchase contracts for standardized goods and services contain *general terms and conditions* in which rights and obligations of the contracting parties are laid out. As electricity distribution and supply are standardized services in the household sector, electricity companies should set up general terms and conditions as well. The latter should be subject to approval by the regulating agency to ensure a minimum level of standardization and consumer protection. In turn, the regulator should establish a clear set of minimum requirements to these terms and conditions. Alternatively, public authorities may prescribe minimum standards by a law or decree.

Apart from obligations regarding the service quality, the general terms and conditions should also contain provisions concerning the obligations of consumers, such as:

- A term for notification of damages to maintain the right to compensation;
- To provide access for the distribution/supply company to private property for specified cases (meter reading, maintenance of technical equipment);
- To ensure proper protection of technical equipment such as meters, that remain in the ownership of the distribution/supply company;
- Penalties such as financial payments or disconnection from the grid in case of manipulation of metering equipment.

The general terms and conditions should also address issues such as the provision of information, terms of payment, conditions and period of notice of contract termination, etc.

Consumers should be provided with information concerning *whom to turn to in order to launch a complaint* with regard to billing or quality of service, for instance. Any complaint should at first be addressed to the relevant company. In order to make it easier for consumers to address the correct person, the companies' general terms and conditions should contain a contact (phone number) as well as a maximum time (in days), in which the company has to reply to the complaint.

The customer either accepts the answer of the company or has to turn to another institution. To relieve the general court system, the regulator may be given some extra-juridical powers to propose ways to settle a dispute. Alternatively, an ombudsman

system may be introduced to overtake the role of mediation. Depending on the general legal provisions, the ombudsman may be granted quasi-juridical powers and suggest solutions, which the parties have to accept[10].

While functioning as courts, regulators and ombudsmen should be independent of the market participants in order to ensure the general acceptance of their suggestions/ verdicts. As a last resort, the general court system should be accessible, if the dispute between a customer and the distribution/supply company can be settled neither directly between themselves nor through the mediation of a regulator or ombudsman.

Dissemination of Information

One of the major hindrances to perfect competition is the asymmetric distribution of information between those responsible for establishing the market framework (government and regulators) and the market actors (generators, network companies, suppliers, and consumers), as well as among the market participants themselves. In order to overcome this problem, all of these groups should be obliged to provide information to the relevant other actors.

Electricity regulations should be treated as any other governmental regulations and respectively published in official journals. The regulator should make its decisions public so that market participants may have direct access to the latest information. For non-eligible households regulatory decisions concerning supply price controls are of special interest and therefore they may be published or notified in mass media. Similarly, electricity distribution and supply companies should be obliged to inform each consumer about their general terms and conditions and amendments thereof by mail, daily newspapers and/or Internet as well as to provide free access to them in their offices.

7. Institutions for Consumer Protection

The term "institutions" may be interpreted as the general rules of the society (laws, contracts, habits, etc. - institutional environment) or as the organized players (companies, parties, governmental bodies, etc. - institutional arrangements)[11]. In the following we

[10] For example, in the State of New South Wales (Australia) the electricity ombudsman has the power to settle disputes with a value up to $20,000 AUS (12,000€). If the defendant agrees however, the ombudsman may make legally binding decisions up to a value of $50,000 AUS (30,000€).

[11] A more detailed discussion of the term can be found in North, D.C., *Institutions, institutional change and economic performance*, Cambridge University Press, 1990, and Williamson, O.E., *A comparison of alternative approaches to economic organization*, Journal of Institutional and Theoretical Economics (JITE), issue 146, p. 61-71, 1990

will use the term in the latter sense. The two major institutions for consumer protection in a liberalized electricity market are regulators and consumer associations.

Electricity Market Regulator

To ensure the existence of an efficient, fair and sustainable competition, which is a crucial condition for protecting consumer interests, four basic conditions must be met:

- Abolishment of legal barriers to market entry (eligibility);
- Creation of structural preconditions for competition in generation and supply (unbundling);
- Access to the grids on transparent, non-discriminatory grounds;
- Provision of sustainable incentives for investments into the grids.

Regulation plays an important role in ensuring the existence of these conditions. Once a market environment has been created, regulatory tasks focus mainly on the prevention of unfair market practices and regulating the natural monopoly functions of the network (transmission and distribution).

Apart from the issue whether electricity market regulation is to be delegated to one or several institutions, regulatory activities typically are faced with three main problems:

- How to ensure the independence of the regulatory institution(s)?
- How to exert control over the regulatory institutions?
- How to ensure the reliable enforcement of regulations?

The need for *independent regulatory institutions* is due to the risk of regulatory capture. The government, the regulated firms, or other interest groups have incentives to influence the regulator in order to make him take decisions in their favour.

In order to minimize the danger of such meddling at least three conditions should be met:

- The regulatory tasks, competence, and guidelines of the regulator should be well defined.

- Reliable financing of the regulatory institutions should be guaranteed.
- The rules governing the appointment and structure of regulatory institutions must be transparent, fair, non-partisan, and not subject to influence peddling.

If a regulator has broad competences for the design and functioning of the market and a large discretion over the revenues of network companies and suppliers to non-eligible customers, it has to be *controlled*. Regulators must be held accountable for failures to achieve their mandate as well as for deviations from that mandate. Transparency and free access to information regarding decisions are necessary to ensure this accountability. Furthermore, the regulator's mandate must be clearly defined and regulation methods must be ex-ante determined; it would otherwise be impossible to establish culpability for regulatory failures.

When the guilt of a regulator is proven, it has to be sanctioned. Without sanctions regulators would lack incentives to fulfill their mandate.

Appeal mechanisms to a disinterested but competent third party should exist to ensure fairness in important regulatory decisions. The participation of affected parties in the decision making process may also be an effective means of ensuring fairness and pre-empting the need for such appeals.

Future regulatory actions bring uncertainty for the regulated industry, especially for monopoly companies, which are under direct price or revenue control. Energy companies typically deal with this uncertainty by charging risk premiums that are ultimately reflected in the prices paid by consumers. Regulatory risk in the network industry is especially important as investments are often amortized over long periods and involve huge sunk costs. A high regulatory risk will likely increase capital costs for these companies and may even make debt-financing problematic. Thus, in order not to increase unnecessarily regulatory risks (and capital costs respectively), regulation should be transparent, fair and predictable.

Consumer Associations

Consumer associations may play an important role in consumer protection, especially in the representation of consumer interests and the dissemination of information.

To represent effectively consumer interests, associations may either provide input to government decision makers and regulatory bodies or lobby these same bodies. Associations disseminate information by acting as intermediaries between the government, regulator and companies, on the one side, and consumers, on the other, and by providing advice to consumers that improves educational level of the society with regard to electricity matters.

To fulfill their tasks efficiently and effectively, consumer associations should meet several conditions. They must build up *sufficient expertise in electricity market*s and know well their rights within the regulatory framework. Otherwise there is a danger ineffective measures for consumer protection to be applied and the credibility and standing of the consumer associations in negotiations to be diminished.

Usually, there are several consumer associations within one country that are spread across the territory. This decentralized approach serves consumers as they are able to access the association operating in their neighbourhood. On the other hand, a more centralized approach seems more suitable to reap economies of scale and scope. In this respect, it might be reasonable one consumer association to specialize in energy matters and at the same time to closely partner with other consumer associations. This specialized association would then be responsible for representing consumers in official cases, for spreading information among the other consumer associations and consumers. It might serve as a central information hub, to which consumers may turn in case of a complaint or when seeking advice. Alternatively, consumer associations may found an umbrella organization, which would then create a committee (with representatives of different consumer associations) responsible for energy matters, including representation of consumer interest and spreading of information to the different consumer associations.

In order to effectively represent consumers' interests and fulfill the function of a source of advice and information, *consumer associations should ensure that consumers are informed about their existence*. Therefore, information campaigns seem necessary, if the general knowledge about consumer associations is low.

Without a *stable financing*, an effective representation of consumer interests is not possible. Sources of financing for consumer associations include government's subsidies, membership and service fees, donations, etc. If one rejects the pure neo-classical model,

which does not see any grounds for a specific consumer protection policy, and approves the liberal model of competition and information or the concept of counter-force, it can be argued that a basic part of consumer associations' costs should be covered by public budgets.

Electricity consumers that profit from and have access to the services of consumer associations may be charged with a compulsory levy.[12] If e.g. all households contribute to a small extent to the revenues of an association, an effective representation of their interests may be provided. This financing seems justified only as long as the interest of households are not too disperse and consumers receive a net gain from the compulsory levy.

[12] Indirectly this is the case in the UK, where the energy specific consumer association Energywatch is financed by license holders. In return they pass on these costs to their customers.

EUROPEAN UNION REQUIREMENTS FOR CONSUMER PROTECTION IN THE ELECTRICITY SECTOR

Electricity plays a key role in the EU economic and social development. It is, in itself, one of the largest economic sectors in the Union. From the perspective of large industries, which are major consumers of electricity, a competitive market is crucial to improving their international competitiveness. From the public's perspective, a dependable supply of electricity is a vital necessity.

1. EU Policy in the Electricity Sector

In 1988 the European Commission released "The Internal Energy Market" report, in which it identified the obstacles to the establishment of a single electricity market and proposed solutions for their quicker overcoming. The idea of a common energy market, meaning electricity market as well, was not new. Efforts to coordinate the national energy policies on a European level were made as early as the 1950's. These early efforts resulted in the establishment of the European Coal and Steel Community and the European Atomic Energy Community. The Single European Act (1986), which declared the intention of establishing a single internal market with a free movement of goods, services, capital and people, evidently envisioned the energy sector as well, though that was not explicitly stated.

Despite the strong opposition of certain Member States in recent decades, the Commission pursued this goal by maintaining the liberalization and integration of electricity markets on the agenda of the European Community. In 1996, eight years after the publication of the Internal Energy Market Report, the EU's energy ministers unanimously supported a directive for the opening of the national electricity markets. This directive establishes the rules for the functioning of the single internal electricity market and incorporates the goals of the common energy policy.

This document referred to as *Directive 96/92/EC of the European Parliament and of the Council concerning common rules for the internal market in electricity* (Directive 96/92/EC) constitutes the main elements of the Union's *aquis communautaire* in the field of electricity. It establishes the framework for the development of electricity generation, transmission, distribution and supply. It also defines the rules for the organization and functioning of the single market, the access to the market, the criteria and procedures for issuing permits for the construction of new capacity, and for the management of electricity systems. The Directive 96/92/EC required most EU Member States to progressively open their electricity market at least by February 19, 1999.[13]

Other EU documents which concern the common electricity policy, include:

- The Treaty of the European Coal and Steel Community;
- The Treaty of the European Atomic Energy Community;
- The Agreements of the Trans European Energy Networks;
- The standards for efficient energy use, renewable energy, and innovative energy technologies (European Community Communications for the Synergy, SAVE, Altner, Joule-Thermie programs);
- Directive 2001/77/EC of the European Parliament and of the Council of September 27, 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market;
- Council Directive 90/547/EEC of October 29, 1990 on the transit of electricity through transmission grids.

There is no specific chapter on energy in the Treaty of the European Community, the Treaty of the European Union, and the Treaty of Amsterdam. Coal as a major energy source has been a focus of the Community policy since 1952, and the collaboration in the development of atomic energy has been a focus since the Treaty of the European Atomic Energy Community (1958).

In spite of the absence of concrete clauses per treaty, governing energy alone, the Community develops and applies a common policy in the field, including in the electricity sector. This raises important issues regarding the competence of the

[13] Belgium and Ireland had an additional one-year grace period while Greece had two.

Community institutions to carry out such a policy because they are permitted to exercise only the authority assigned to them. The institutions find grounds for their competence in the set forth in the treaties (1) freedom to render services and (2) necessity of harmonization of measures to ensure the functioning of the EU's internal market. Using these grounds the European Parliament and the Council adopted the Directive 96/92/EC and in December 1998 the European Council adopted a multi-year framework programme for actions in the energy sector (1998-2002), which aimed at satisfying demand, guaranteeing the security of energy supply, creating conditions for improving competitiveness in the Community, and ensuring the protection of the environment.

The European Commission defines as a primary goal of the common energy policy the guaranteeing of security of supply for European citizens and companies at competitive prices while ensuring the protection of the environment. The main priorities of the EU towards the attainment of this goal are:

- *To decrease the dependence on imported energy resources* in order to prevent any problems in electricity supply in a long run. The EU currently depends on imports for half of its primary energy resources.
- *To establish a single, integrated electricity market* to increase competitiveness and create employment. The more competitive prices in the sector are especially important for the European industry in terms of the globalizing world economy because the European business pays for electricity far more than that of the USA.
- *To develop the electricity sector without compromising the protection of the environment*. In this regard electricity policy and measures are a key factor for addressing environmental issues, especially with respect to the climate change.

In addition to these priorities, the Accession Partnership agreements have provisions for the development of functioning electricity markets in the EU accession countries. These provisions make assessments of the priority areas on which each country should concentrate its efforts in preparation for accession. The Accession Partnership agreements also contain provisions for ways in which the PHARE programme will support these efforts. These include for instance recommendations and support for energy efficiency improvements and the equalization of prices with market realities[14].

[14] The regular EC reports on Bulgaria's progress towards accession from 1998 to 2001 may be found at www.evropa.bg (The 2002 report is expected in November).

2. Consumer Protection Policy in the EU

Consumer protection first appeared in the EU legislation on April 14, 1975, with a resolution of the European Council for a preliminary programme to inform and protect consumers. The programme lists five fundamental rights which serve as the basis for Community legislation in this area. These include: the protection of health, the protection of economic interests, compensation for damages, right to information and education, and right to representation.

A second action programme was launched in 1981. The Single Act followed this in 1987. The latter gave the Commission the authority to propose measures designed to protect consumers, taking a "high level of protection" as a base. This provided the foundation for the legal recognition of consumer policy. During the 1980s and early 1990s, several measures were taken which emphasized general product safety and unfair contractual terms. In 1992, the Maastricht Treaty enshrined consumer protection as a fully-fledged Community policy. After the adoption of the Maastricht Treaty several green papers concerning consumer protection were released. As a result of the BSE crisis, particular emphasis has been placed on consumer health and food safety. The Treaty of Amsterdam (1992) re-formulated the aim of consumer protection policy and included into it the protection of the health, safety, the protection of economic interests of consumers, the promotion of the right to information and education and of the right to organize themselves to safeguard their interest. The areas and interests that are not explicitly mentioned in the Treaty are considered a part of the economic interests of consumers.

The Treaty of Amsterdam highlights the transversal character of consumer protection, claiming that consumer protection requirements shall be taken into account in defining and implementing other Community policies and activities. For the purposes of coordinating the EU policies, including the electricity policy, with the consumer protection policy a Consumer Committee[15] has been established. Among the functions of this Committee are:

- To organize general discussions on issues concerning the interests of consumers;

[15] Resolution 2000/323/EU of the European Commission of May 4, 2000.

- To give opinions on issues concerning the protection of the interests of consumers in the Community;
- To provide consultations and directions to the Commission, when the latter stipulates policies and activities regarding consumers;
- To inform the Commission about the development of consumer policy in accession countries;
- To collect and submit information about the activity of the Community to national consumer organizations of countries outside the EU.

In 1999 the European Union published a new action plan for consumer protection (1999-2001)[16] and in late 2001, released to the public a discussion paper titled "Ideas for a Consumer Policy Strategy" which was approved in May 2002 as a Consumer Policy Strategy (2002-2006)[17] .

In October 2001, the European Commission published a Green Paper concerning consumer protection with the aim of consulting with the public on the future direction of EU consumer protection policy. In the Green Paper, the Commission suggested two options on how to improve and harmonize consumer protection in Europe:

- A specific approach based on the adoption of a series of further directives, or
- A mixed approach of a comprehensive framework directive supplemented by targeted directives where necessary.

In a hearing in December 2001, the EU Commission argued that the latter provides improved legal certainty and a reduction in legal fragmentation. In addition, the mixed approach would lead to a simplification of the regulatory environment by introducing one harmonized set of rules. This would encourage the use of self-regulation by industries that have a strong, common interest in retaining consumer confidence.

[16] Between 1990 and 2001, the Commission published triennial action plans.
[17] "Consumer policy strategy 2002-2006", Commission Communication to the European Parliament, the Council, the Economic and Social Commission and the Commission of the Regions, COM(2002) 208, Brussels, May 2002

3. Institutions for Consumer Protection

There are two main types of consumer protection bodies operating on a European wide level: those that are a part of the European Commission and those independent of it which nevertheless operate contiguously with it and of which we will briefly describe only two that work across specific economic sectors.

In 1989, the Commission established an independent *Consumer Policy Service* which was later transformed to a full Directorate-General (DG XXIV). Following the BSE crisis in 1997, the Commission reorganized the directorates' departments, and the Directorate-General XXIV was assigned responsibility for consumer policy and health protection. In 1999, the Commission renamed DG XXIV as the *Directorate-General for Health and Consumer Protection*.

Prior to the establishment of the Consumer Policy Service, consumer interests were represented by the *Economic and Social Committee* and the *Consumer Committee*. In addition to these Committees, the EU invites consumer representatives to participate in advisory bodies, hearings, etc.

In addition to this formal participation in decision-making, the informal access of interest groups to decision-makers via non-institutionalized lobbying plays an important role.

Since 1962, the *European Consumers' Organization* (Bureau Européen des Unions de Consommateurs - BEUC) has been operating as a federation of thirty-four independent, national consumer organizations from twenty European countries. The Organization defends the interests of European consumers in the EU policy process. It focuses on issues that have direct economic or legal consequences for consumers and on those that impact consumer health, safety, and the environment. The liberalization of the electricity market is a high priority for the Organization which is striving to ensure that the benefits of liberalization are passed on to households and that basic electricity services are secured.

Founded in 1999, the *Association of European Consumers* (AEC) currently represents the interests of thirty-three consumer organizations from seventeen countries. Their work emphasizes social and environmental awareness, including sustainable

development, the representation of consumer interests, food safety and collaboration with Central and Eastern European countries.

4. Main Aspects of the Protection of Electricity Consumers

If only economic indicators were to play a role, electricity may turn out inaccessible for a significant part of the population, such as people, living in remote or sparsely populated regions. In this sense the issue of imposing public obligations for services of general economic interest in a liberalized European electricity market is significant. The very Directive 96/92/EC provides for imposing public service obligations on companies operating on the European electricity market in order to ensure a balance between market economics and social obligations. This includes for example, the obligation to supply electricity at the same price to all consumers, no matter how remote or sparsely populated their location is. The Directive 96/92/EC also creates a framework for defining and imposing public service obligations. The exact definitions and applications are then determined by individual Member States according to their needs and circumstances. Because of the differences among the separate countries, this may lead to the introduction of contradictory mechanisms hindering the functioning of an integrated energy market. That is why the efforts of the European Commission are directed namely to the establishment of milestones that to be used by the Member States.

The opinions about the minimum legal obligations for the provision of public services are multidimensional and even controversial. However, there is a consensus among the EU Members that public service obligations may be implemented without causing undue harm to the competition on the electricity market, although at first glance they seem incompatible with it. The consensus extends to the following aspects of the general framework for public services:

- A right of access to high-quality electricity supply at affordable prices must be guaranteed.
- A right to electricity for all consumer groups must be ensured, including if necessary special tariffs for vulnerable groups such as the poor and disabled to be applied.

- Consistent measures for environmental protection must be implemented with an emphasis placed on the promotion of renewable electricity sources (through the marketing of "green certificates" for example) and energy efficiency.
- Consumers must be kept informed; they must be informed about the source of their electricity, the applicable price structure, and comparisons of their potential suppliers.
- Regulatory bodies must function independently and their members must possess technical expertise to assess problems and determine solutions.
- Funds for public service obligations must be collected in a transparent and non-discriminatory procedure compatible with the functioning of a competitive energy market.

Given the experience of the Member States, the Commission was worried about protecting consumer interests in an internal energy market that is fully open to competition. The goal of reforms in the electricity sector is the completely opened market to bring real benefits to European citizens in terms of prices and quality. The achievement of this goal requires the market liberalization not to be viewed without criticism. That is why the following several significant issues were placed on the agenda:

- Will the new requirements for companies working in the competitive electricity market allow for accurate comparisons between the prices and quality of services offered today and in the future?
- Is there a risk the grouping and concentration of electricity operators observed now on a generation level to lead to cartel agreements in a long run, thus depriving the public of electricity supply at affordable prices?
- How will the market be organized and to what extent will large intermediaries and suppliers account for the interests of end-users in their pricing?
- Will the liberalization of the electricity markets actually lead to a decrease in electricity bills and improvement of services to low-income households or the poor?
- What efforts and structural measures should be taken to prevent low-income

and remote consumers from being excluded from the benefits of the market opening?

- What organizational and financial mechanisms can ensure the public control with regard to the protection of the right of all consumers to electricity supply at reasonable prices and the social correction of the activity of private operators, while simultaneously ensuring a reasonable rate of return for the latter?

These issues have not been prominent until the present because of the active role of governments in both administration of electricity markets and application of measures for protection of electricity consumers on a national level. The measures employed most often include the establishment of special social prices, introduction of guarantees for minimum supplied quantities, social aid to households in debt to electricity suppliers, the requirement of equal prices for all households, etc. Measures of separate countries are often quite different and place European electricity consumers in different positions. That is why it is of great importance for the EU to harmonize the social requirements and measures with respect to electricity supply.

5. Challenges to the Protection of Electricity Consumers

The Directive concerning common rules for the internal market in electricity that has already been incorporated in the national legislations of the EU Members is the basis for the liberalization and integration of the national electricity markets. The liberalization is expected to lead to a drastic decline in electricity prices in the Community. The main challenge confronting both the EU Members and the European Commission is how to stimulate the faster harmonization and integration of the 15 separate markets, so as to establish a common market for all electricity companies and consumers.

In March 2001 the European Commission prepared a proposal[18] for a package of measures to accelerate the establishment of the single electricity market. The proposals of the Commission aimed at amendments to the Directive 96/92/EC, designed to increase opportunities for competition and to liberalize the market for industrial and

[18] A Directive to amend Directive 96/92/EC concerning common rules for the internal market in electricity was proposed - Commission Communication COM(2001) 125, March 2001

commercial consumers until 2003 and for households until 2005. Two measures are regarded as requisites for the successful liberalization: (1) the establishment of independent regulatory mechanisms and institutions, and (2) the separation of transmission and distribution from generation and supply of electricity.

In the Directive 96/92/EC, the EU attempted chiefly to establish a framework for competition in the electricity sector, while leaving issues of consumer protection to the Member States. By contrast, the proposed amendments from 2001 put consumer protection in a prominent position. Member States are required to introduce appropriate provisions to ensure the attainment of the public service objectives. These include:

- „*Universal service*" is to be introduced and defined as the right of each European consumer to receive electricity of high quality at an affordable price. This may be achieved in different ways, for example, by incorporating an obligation to render a universal service in the contract or in the license of the supplier of electricity to households.
- The implementation of adequate measures *to prevent unreasonable interruptions in electricity supply* to the elderly, unemployed, and disabled is to be ensured. This may be regulated in the contracts or license agreements of suppliers as well. In this regard Loyola de Palacio, Commissioner for the relations with the European Parliament, transport and energy, argued that although the attainment of this goal is delegated to the separate EU Members, it is necessary that a comparative analysis be effected to identify the best practices.
- The *protection of consumers*, in particular, with respect to the transparency of contract terms and conditions is to be ensured. The Commission proposed that the identification of the supplier, the service rendered, and information about prices and tariffs be specified in service contracts. In addition, the Commission proposed that the Member States draw up two-year reports on the approved measures for imposing public service obligations in order to enable the better assessment of the progress of each country.
- *Security of electricity supply* is to be guaranteed to prevent the problems that occurred in California. One of the proposed measures in this regard is to

establish an institution to monitor the market functioning (the balance of supply and demand, transmission capacity, competition level).

- The electricity sector is to be developed so that to ensure *the protection of the environment***.** This may be carried out by modernizing power plants with new technologies enabling the reduction of pollution.

These basic issues were included in the European Commission's Consumer Policy Strategy (2002-2006). The objective of this Strategy is to integrate the issues of consumer protection in all the remaining policies of the European Union, to maximize the single market benefits for consumers, and to prepare for Community enlargement.

Concrete decisions on the Commission's proposals were expected to be taken at the European Council in Barcelona in March 2002. Instead, the ministers only urged the Council and the European Parliament to adopt amendments, including "*a decision on further measures taking into account the definition of public service obligations, security of supply and in particular the protection of remote areas and of the most vulnerable groups in the population*"[19] .

The only significant achievement was the decision to open 60% of the total European energy market to competition. The electricity market for industrial consumers is expected to be entirely liberalized by the end of 2004. The deadline for the full liberalization of the market will be determined on the basis of the Commission's proposals by the end of 2002. It is significant that, after the Barcelona's Council, decisions regarding these proposals may be taken with a simple majority and not a consensus.

During discussions regarding the liberalization of the energy market for households, France alone opposed and blocked the proposal for households to freely choose their supplier. The French ministers insisted on the adoption of a decision for additional measures for determining public service obligations, security of supply, and protection of vulnerable groups and consumers in remote regions.

Searching for an approval of the Member States on amendments to the Directive 96/92/EC, in July 2002 the European Commission reformulated its initial proposals. The new proposals are in the spirit of the initial attempt of the Commission to improve consumer protection, to ensure environmental protection, and to guarantee the security

[19] EU, *Barcelona European Council, March 15 and 16,* Press release and document, 2002, http://ue.eu.int/newsroom/NewMain.asp?LANG=4

of energy supply. They account for France's concerns, as well as other recommendations received during the review and discussions of the initial proposals.

6. Conclusions for Bulgaria

Milestones for the Bulgaria's Energy Policy

The agreements of the Community provide the framework with which accession countries should coordinate their legislation in the energy sector and general objectives of which they should incorporate into their national policies.

The development of a competitive internal energy market, the integration of the Bulgarian energy sector and energy market into the European ones and the provision of socially just reforms are defined as main priorities of the Bulgarian energy policy. Therefore, the framework for the development of the European energy sector, the goals confronting the separate EU Members and the common policy in energy and consumer protection determine the development of the Bulgarian energy sector and the policy and measures for protection of electricity consumers.

The harmonization of the Bulgaria's energy legislation with that of the EU is occurring through the transposition of the three main objectives of the EU's energy policy - security of energy supply, greater competitiveness, and consumer and environmental protection - into the national regulatory framework. The principal document that is to be transposed in the Bulgaria's legislation is the Directive 96/92/EC. As an accession country, Bulgaria has to ensure a high quality electricity supply to all consumers at a fair and affordable price. The country should coordinate its policy with the reference points, which serve as a landmark to the Member States in the implementation of their policies in the energy sector and which more particularly are related to:

- The right of access to high quality energy resources at affordable prices.
- The social aspects (including special tariffs for the poor and disabled people).
- Environmental protection.
- Information to and protection of consumers (origin of electricity, price structure, comparisons).

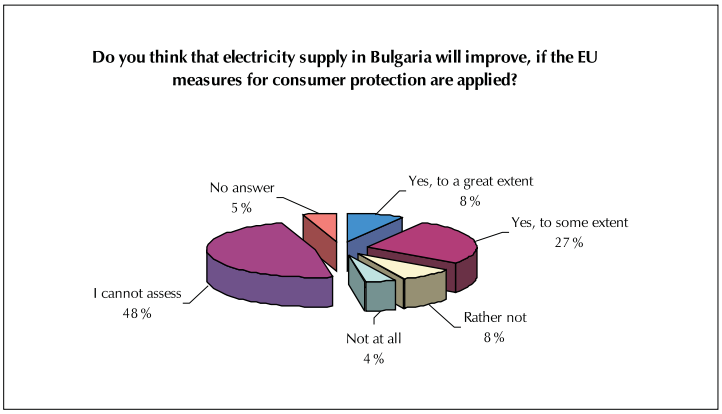
As part of its efforts to integrate the national electricity market into the common European market, Bulgaria must apply measures to meet the following priorities in the European policy:

- Guaranteeing the right of any person to receive electricity of high quality and at an affordable price.
- Ensuring adequate protection against unreasonable interruptions in supply to the elderly, unemployed, disabled, and other highly vulnerable consumer groups.
- Providing a high degree of transparency in contract terms and conditions regulating the electricity supply to households.
- Guaranteeing security of electricity supply through maintenance of sufficient production capacity for the domestic market.
- Implementing a policy designed to decrease the harmful effects of Bulgaria's electricity sector on the environment as a precondition for sustainable development of the country.

Expectations for the Effect of the EU Measures for Consumer Protection on Bulgaria

An interesting aspect of Bulgaria's preparation for the EU joining is the opinion of the Bulgarians which of the EU measures in the field of electricity consumption should be applied in the country with priority. The respondents in the national survey within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* render a leading role to the social aspects of electricity supply: 63.8% favor the development of social protections within the electricity sector as a priority. This function is not typical of commercial entities such as electricity distribution companies in Bulgaria. It should be integrated in the state policy and assumed by the state social funds.

Figure 1: Expected Impact of the EU Measures for Consumer Protection on Bulgaria



Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001

A comparatively smaller share of consumers indicated as a leading necessity the measures related to security of supply (42.9%), consumer protection issues (32.4%), introducing a simple, quick, and clear procedure for complaints (30.0%), and clearly defined rules for electricity supply contracts (26.7%). To a great extent these lower results are to be attributed to the poor awareness of the society of the sense of these measures and the benefits of their implementation.

Only 47% of those surveyed expressed an opinion on the potential effect of European requirements for consumer protection on the electricity sector in Bulgaria. Of these, only 35% had positive expectations. 12% did not expect electricity supply to improve (see Figure 1). Also striking is the fact that more than half of those surveyed (53%) did not have any opinion, mainly as a result of their lack of knowledge of the issues. This supports our contention that one of the priorities of those involved in the sector - state bodies, consumer protection associations and other institutions and organizations related to consumer problems, energy and social policy - must be to actively provide information to households. It can be expected that by improving the knowledge of consumers, most of them will better understand and support both the energy reforms and the efforts of the administration for a quicker progress towards the fulfillment of the EU requirements.

ORGANIZATIONAL RESTRUCTURING AND PRIVATIZATION IN THE ELECTRICITY SECTOR

1. Characteristics of Organizational Restructuring and Privatization of Electricity Sectors around the World

In recent years the development of the international electricity market has been marked by immense structural changes directed towards the creation of an appropriate environment for competition. These changes include the introduction of new forms of market organization, the reassessment of commercial relations, privatization and liberalization. Ongoing reforms are possible thanks to the development of new technologies, the advance of economic analysis in electricity and most of all - the ambition of the separate countries to replace the stately administered market with a completely or partly regulated one.

A highly competitive market cannot exist if there is a market participant able to impose its terms and conditions due to its market power. In electricity sector that requires changes not only on a horizontal level but also on a vertical level because after the Second World War vertically integrated electricity monopolies were established in most countries. That is why the current organizational restructuring includes, on the one hand, commercial spinning-off of electricity generation, transmission, distribution and supply, and, on the other hand, provision of opportunities for several companies to operate on generation and supply levels, where the best conditions for competition exist. Electricity transmission and distribution are considered inappropriate for competition because they require high investments and they do not provide good rates of return. In addition, the performance of these functions requires a high degree of coordination of electricity flows that could be interrupted by the introduction of competition.

Reforms in the electricity sector in a number of countries have been accompanied

by a change of ownership from state to private hands. It is worth noting that although privatization is common during restructuring efforts, it is not a necessary element of this process. Well-run state-owned companies can also operate in a competitive environment, provided that their state ownership does not provide them with special privileges that violate principles of free competition and equal position of all market participants. Privatization favors operating efficiency because it leads to competition in capital markets and gives greater guarantees that the government will not interfere in favor of any corporate player. The benefits of reforms for society however result from market liberalization rather than privatization.

Governments typically pursue the following objectives when they restructure electricity sectors:

- To improve the efficiency of sector companies, especially with respect to their costs and the appropriateness of their investment decisions;
- To attract private capital for financing new projects and expenditures for maintenance of electricity supply equipment;
- To increase revenues to state budgets through the sale of state-owned assets in the sector;
- To ensure funds for financing urgent state expenditures through elimination of subsidies to electricity sector.

The achievement of these objectives and the transition from state administrated to market relations is hindered by some restrictions. Common ones include:

- Imbalance in prices for consumers as a result of subsidies to some consumers at the expense of other consumers;
- Political obstacles to rapid price increases for certain consumer groups, which would be the result of the operation of market forces;
- The need to use local resource because of considerations related to national security, level of employment, etc.;
- Social reactions to the loss of jobs in the sector as a result of the optimization of activities related to electricity generation and supply.

New commercial relations and the new ownership of electricity companies pose a number of social issues such as: will electricity supply be accessible to all in technical and price terms, how will vulnerable consumers be supported under the conditions of market competition and how will the problem of energy poverty be limited under the new circumstances. These threats to the quality and security of electricity supply can be solved through proper regulation in the sector, adequate energy and social policy, precautionary corrective activities on the part of organizations representing consumer interests, and more consumer-oriented activities of supply companies.

2. Organizational Restructuring in the Bulgaria's Electricity Sector

The framework for structural changes in the Bulgarian electricity sector was prepared in 1999 and included the Strategy for the Development of the Energy Sector in Bulgaria till 2010 and the Energy and Energy Efficiency Act (EEEA). The two documents call for socially responsible reforms, setting as their goals the provision of a continuous and reliable electricity supply to consumers in the country at minimum social costs along with sector liberalization and attracting new investments. The attempt to achieve social tolerance of the changes underlies the new energy strategy of Bulgaria approved by the Council of Ministers in April 2002.

Similarly to many other countries Bulgaria started the reforms in its electricity sector from a market structure dominated by a vertically-integrated state-owned company - National Electricity Company (NEK) - with a statutory monopoly in the transmission, distribution, supply, import and export of electricity. Under a monopoly a company is not motivated to pay special attention to consumer servicing because there is no competition effect as a stimulus to improve the service quality, to completely satisfy customers and to establish a good reputation among them.

The structure of the Bulgarian market did not provide for competition and a restructuring of the electricity supply chain was necessary to ensure conditions for decentralization of generation and supply to end-users. In 2000 the first step in that direction was made: NEK was restructured by spinning-off its generation, transmission, and distribution elements. Changes were made in the horizontal structure on the level

of electricity generation and distribution/supply through the establishment of seven independent power producers and seven independent electricity distribution companies. NEK continued to be the only company which carried out the transmission.

At present the structure of the electricity market lacks businesses that deal only with the electricity supply to end-users. The Bulgarian legislation does not include special provisions for this activity and the latter is not subject to separate licensing but is integrated in the distribution function. Hence supply is carried out by the electricity distribution companies, which are monopolies on a regional level regarding households and do not have large stimuli to improve their services and their image among customers.

This market structure and distribution of functions is not an unusual practice and has been observed at the start of reforms in other countries as well because electricity supply to households does not provide large opportunities for profit. In addition, the distribution and supply serve one and the same market segment. Gradually, however, with the introduction of new technologies, the application of measures for more efficient electricity supply, the introduction of efficient regulatory mechanisms, and the promotion of competition in supply to larger electricity consumers, household electricity supply will become a market segment. This will stimulate competition among suppliers and will require the separation of their commercial activities from the operation of the distribution network.

The establishment of new structures in the Bulgarian electricity sector should be accompanied by the introduction of commercial relations alongside the value added chain, subjected to the single buyer model. In this model, independent power producers and electricity distribution companies conclude trade contracts with the single buyer whose role in Bulgaria is performed by NEK. The single buyer model is one of the possible market organizational forms envisaged in the Directive 96/92/EC but it has not been chosen for the entire organization of the market relations in any EU Member State. The major drawback of this model is that it limits the possibilities for competition because of the remaining monopoly of a single company (single buyer) for electricity sales to large customers and distributors. The single buyer model in Bulgaria restricts competition only at the stage of generation and to the extent that the single buyer purchases the generated electricity according to the economical dispatch principle.

The single buyer model has proven itself mainly in countries with a deficiency of electricity, where investors in new generation capacity are attracted through the provision of equal conditions for electricity sale to all producers. In Bulgaria production capacity exceeds domestic consumption and in recent years the excess electricity has been exported to satisfy demand in neighboring countries as well. Based on the experience noted above this implies that Bulgaria does not have the best conditions for the single buyer model. It is worth noting that in countries where independent regulation and competition on the electricity market are unknown, such as Bulgaria, this model may turn out to be suitable for preparing market agents to participate in a regulated or liberalized market. Unfortunately the introduction of the single buyer model in Bulgaria to a great extent proved itself to be a mechanic separation of the electricity companies. It was accompanied neither by efficient activities for the internal restructuring of these companies in compliance with market needs, nor by preparation of a regulatory framework for the next stage of the transition to fully market relations, nor by education of electricity consumers to market habits. In addition, this market structure combined with the state ownership and the impossibility or lack of desire on the part of consumers to pay their electricity bills, cause the government to act as a buffer between the inability of electricity suppliers to collect in full their receivables from end-users and the need to pay electricity producers so that the latter to remain vital market agents. Though this interference maintains the stability of the sector and to a great extent support consumers, neither electricity distribution companies, nor consumers learn appropriate market culture and behavior with respect to electricity supply.

After the establishment of the single buyer model, market agents from the neighboring levels of the value added chain had to conclude written contracts for the purchase of electricity. The rights and obligations of the parties to household electricity supply should have been set forth in signed contracts under general terms and conditions. This however did not take place. Amendments to the EEEA as of the end of 2001 imposed a new model for settling these relations: the rights and obligations of each party must be defined in public general terms and conditions prepared by the company and approved by SERC. Consumers who disagree with these terms and conditions are entitled to conclude on an individual basis additional agreements with the supply

company. Given that the general terms and conditions are prepared by the distribution companies, they may tend to favor the supplier at the expense of the consumer. As such, the role of the regulatory commission is extremely important for balancing the interests of the two parties. It would be helpful in this respect for the general terms and conditions and the potential amendments to them to be the subject of a public consultation process in coordination with consumer protection associations. In this regard we have the good example of the Sofia Electricity Distribution Company, which organized a public discussion of its draft general terms and conditions of contracts with households. Such acts will have at least two positive effects: first, they will provide a means of achieving a balance between the interested parties prior to the submission of the draft general terms and conditions to the regulatory commission; second, they will increase consumer confidence in their supplier.

In Bulgaria the single buyer model is viewed as transitional and will be gradually replaced by the so-called model of regulated third party access. The latter provides for the transmission and distribution companies to transit electricity through their networks according to rules defined by SERC. Eligible consumers and electricity producers/ suppliers negotiate between themselves the terms and conditions of supply without negotiating any conditions for using the transmission and distribution networks.

Initially only consumers with an annual consumption of at least 100 GWh will take advantage of this opportunity. That is the threshold stipulated in the Ordinance on the Access of Independent Power Producers and Eligible Consumers to the Transmission Network (April 2002). An enterprise becomes eligible only if it has no obligations to other electricity suppliers. The general price conditions according to which the transmission network will be accessed are set forth in the Ordinance on the Formation and Implementation of Electricity Prices and Tariffs (March 2002).

Although the legal grounds for the liberalization of a portion of the electricity market is already available, transactions will not be concluded until the beginning of 2003.

During the initial stage of market liberalization the organization of supply to households will not change because they do not exceed the threshold of minimum consumption and respectively will not be classified as eligible. Therefore, households will again be supplied by one company, which will have a monopoly position.

3. Privatization in the Bulgaria's Electricity Sector

Development of the Privatization in Bulgaria's Electricity Sector

The separated independent companies in the Bulgarian electricity sector are entirely state-owned. Competition among them is unlikely to develop provided that enterprises have the same proprietor. This is why the next step towards the establishment of competition in the Bulgarian electricity sector depends on the "dissemination" of ownership among a greater number of proprietors. In addition, it is expected that as a result of private sector participation, funds for the improvement of the electricity infrastructure will be ensured, new technologies will be introduced, and management experience in both the enterprise process and relations between market agents will be transferred.

The process of privatization in the Bulgarian electricity sector started in 2000 with the offer for privatization of 11 small hydroelectric power plants (HPPs). By August 2002, 20 HPPs have been privatized or their buyer has been selected in a tender procedure. These enterprises constitute an insignificant part of the electricity production in Bulgaria, as they account for only 1.5% of the installed capacity and only 0.8% of the generated electricity. As a result of this and of the fact that these companies do not have a direct connection with households, no apparent consequences of this privatization could be found.

In 1998 the government initiated negotiations with Entergy for the establishment of a joint venture company to rehabilitate Maritza East 3 TPP as well as with CCC (the majority share of its equity was later bought by AES) for the construction of new units on the site of Maritza East 1 TPP. The expectations are that the realization of those projects will start in September 2002 and at the beginning of 2003 respectively.

The insignificant progress in the electricity sector privatization is a direct consequence of the mutual impact of a number of factors from previous years. These include the lack of a complete and clear regulatory framework, an inefficiently functioning regulatory body, and the lack of a clear, long-term strategy for the privatization in the sector. The success of the privatization requires a good legal and regulatory framework to be established prior to the ownership restructuring to assure potential investors that their

interests will be protected in long run and that they will work in a stable and predictable environment. The timely and successful formation of this framework is crucial before the next big step in the sector privatization, which will encompass the seven electricity distribution companies and will have direct consequences for households.

Attitude of Bulgarians towards the Privatization in the Sector

An interesting aspect at this stage of the privatization is the opinion of consumers regarding the need to change the ownership structure of the electricity companies.

In order to better understand the attitude of Bulgarians towards the privatization of electricity companies it is necessary to consider the dynamics of public trust in privatization over the course of several years.

At the start of the process in 1993 the fear of the ownership change predominated. As a result of the aggravating financial condition of state-owned companies, the bad macroeconomic indicators, the escalating economic crisis, rising unemployment, and the decreasing living standards, people realized more and more clearly the objective imminence of the privatization.

The attempts to achieve social justice and broad participation of the public in the process through mass privatization turned out unsuccessful and did not enrich many of the participants. In addition, many of the enterprises whose capital was privatized in the mass privatization continued to experience difficulties. In certain cases there were internal tensions and disagreements among the equity owners themselves as well as between them and minor shareholders. This further aggravated the conditions of the respective companies. Whereby one majority owner subsequently consolidated the capital, the consolidation process did not proceed quickly and fluidly.

At the same time, the condition of the companies that remained under state ownership continued to worsen while unemployment soared. In 1999 strikes began occurring with demands for faster privatization of certain enterprises as the only possibility for their survival as economic agents. The decisive acceleration of the privatization in the last four years was to some extent at the expense of the quality of the separate transactions. Most enterprises were practically de-capitalized while the

interests of strategic investors remained low. Some of the companies were sold to management-employee companies and the lack of strategic investors further aggravated the already difficult financial situation of most of them. As a result of these problems many companies became insolvent. Meanwhile, steps were undertaken to terminate dozens of contracts because of non-performance of the contract terms by the buyers.

Over the course of the last year there were a number of scandals, related to concerns for corruption in certain privatization deals. This development led to a dramatic decline in the public trust in the process and increased concerns for the next stage of privatization which deals with the natural monopolies, including those in the electricity sector.

Along with the aggravation of the public trust in privatization, several other factors directly influencing people's expectations of the ownership change should be considered as well: (1) the low living standard and low income of the predominant part of the population[20], and (2) insufficient awareness of the particular steps in the restructuring of the natural monopolies, of the experience of other countries, and of the protection of consumers' rights during the reforms. The influence of these factors has its natural reflection on the attitude of Bulgarians towards the privatization of the electricity companies.

According to the results of the national survey within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* 25.4% of Bulgarians view the privatization of electricity companies as necessary, while 41.4% consider it useless. Among those who support the sector privatization in principle, 53.0% are of the opinion that the process should impact electricity producers, 37.6% - the electricity transmission company, 61.4% - suppliers. The share of those who felt incapable of judging whether a sector privatization is necessary is relatively high (33.4%). Almost 80% of the latter stated that they had no data about the reforms in the sector, and 55% did not know their rights and obligations as electricity consumers. These data lead us to conclude that the lack of a clear position among consumers is mainly the result of insufficient awareness of the restructuring process.

Opponents of the privatization process and those who did not state an opinion on the necessity of the process are typically between fifty and seventy-five years old, have a primary or secondary school education, are in the country's lowest income bracket,

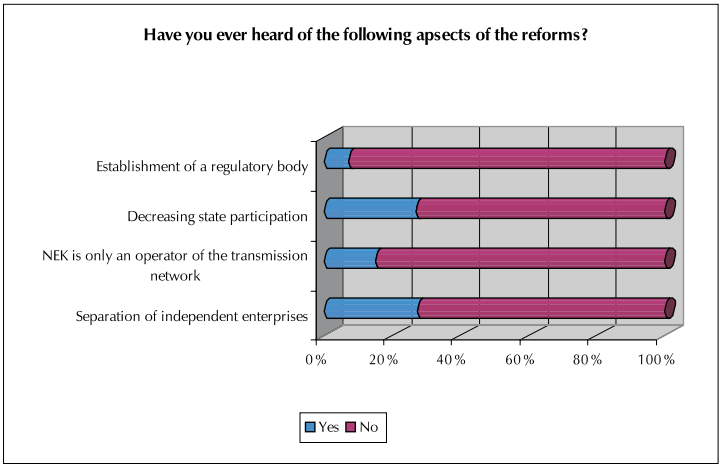
[20] The results of the national survey show that 68% of those surveyed consider their financial condition as bad or very bad and 64.7% of them have monthly incomes of less than 300 BGN.

and typically live in rural regions and small towns. As a result they are the most vulnerable group to any unfavorable changes in the sector for consumers. Consequently, an active explanatory campaign should be carried out among them about the activities which the government plans to undertake to protect their rights as consumers and to ensure their access to electricity services after the changes take place.

4. Consumer Awareness of the Reforms in the Bulgaria's Electricity Sector

The results of the national survey demonstrate a low degree of awareness within society of the reforms in the electricity sector. Only 27.3% of those surveyed have ever heard of the separation of NEK from suppliers, 15.3% are aware that NEK's functions are restricted to the purchase of electricity from producers and its transmission to the distribution companies. 27.2% are aware that state participation in the energy sector decreases due to the ongoing privatization and 7.4% - that an independent regulatory body was established in the sector (see Figure 2). The degree of the unawareness of structural reforms in the sector varies from 72.7% to 92.6%. More than 60% of the respondents from any age group are not familiar with the reforms. The highest degree of unawareness is detected in the groups under twenty-five and over fifty years.

Figure 2: Households' Awareness of Electricity Sector Reforms in Bulgaria



Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001

4.5% of those surveyed think that they have enough information about the reforms in the sector, 18.8% have received some information but need more, 33.8% know almost nothing and would like to receive information, 34.6% do not know anything and are not interested. The degree of consumers' lack of familiarity with the restructuring in the electricity sector is especially high and an explanatory campaign needs to be carried out as soon as possible. A more detailed analysis of the social-demographic characteristics of the respondents experiencing information "hunger" and wishing to satiate it, shows that these are mainly representatives of households with the lowest income and social standing, living in rural areas, with primary and secondary school educations, between fifty-one and seventy-five years old, who consider their financial condition bad. In practice they are the most vulnerable to any changes, taking place in the activity of natural monopolies, because they are least flexible with regard to the financial conditions of the services, rendered by those monopolies. Therefore any explanatory campaign should be directed mostly to them.

5. Projected Impact of Organizational Restructuring and Privatization on Electricity Prices and Quality

One of the effects, expected as a result of the ongoing reforms in the EU electricity sectors, is a decrease in prices for end-users. A similar effect can be expected in Bulgaria as well but only in the long run. Before experiencing these consequences of the sector reforms however, electricity prices for households will increase till they reach their economically justifiable level. This is necessary to guarantee that the companies, operating on the Bulgarian market and servicing households, will be able to reap economic benefits from this activity without sacrificing their profit from servicing other market segments.

Increasing prices undoubtedly raise issues relating to affordability. If the cost increases quickly, low-income households may not be able to adapt to the changes. This could lead to financial problems for an electricity supplier. This is why a gradual price increase policy during the transitional period, accompanied by clear signals to consumers regarding what price changes to expect should be pursued rather than an abrupt price increase policy.

In the long run electricity prices for households may decrease mainly as a result of

the more efficient use of resources by electricity enterprises attempting to maximize profits. When the household electricity market is liberalized, competition among suppliers will probably encourage the reduction of the unit rates for electricity supply.

Market competition and attempts by private operators to maximize profits may lead to reductions in transmission losses, to more efficient uses of primary energy resources, to the introduction of new high-tech and efficient systems through investments, which the State cannot provide because of its limited financial resource. These improvements may in turn reduce the number of unplanned interruptions and the time needed to restore supply.

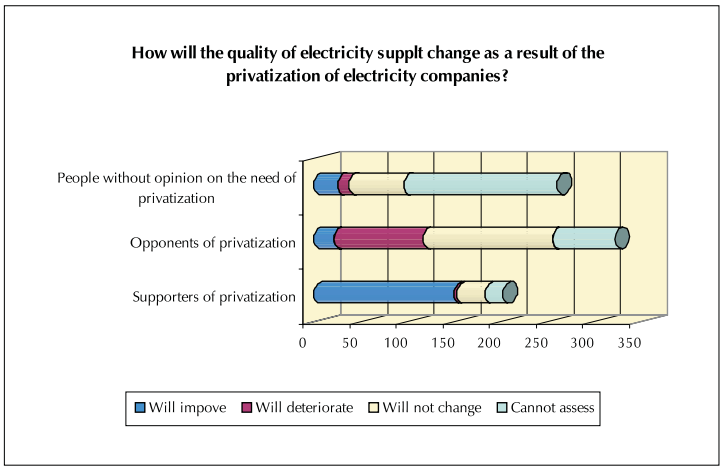
The practice in the EU shows that the market restructuring, the privatization and the liberalization lead to internal restructuring of electricity companies. One of the main aspects of the internal restructuring is the decrease of the number and relative share of the employed persons with technical competence and the emphasized opening of new workplaces for specialists in marketing and customer relations[21]. Private enterprises, especially those operating in a truly competitive environment, tend to offer better customer services than government monopolies. Improvements may include new possibilities for deferred payments, improvements of customers' awareness of their rights and obligations, provision of consultation services, etc.

One goal of the electricity market liberalization in Europe is to improve the efficiency of participants through competition. The achievement of this goal in Bulgaria reveals good perspectives for the improvement of competitiveness of both the electricity and the other sectors. This will finally impact on the well being of society as a whole.

The opinion of Bulgarians about the impact of the privatization on electricity prices and quality is another interesting point. 27% of those who support the privatization think that quality will improve, 14.2% that it will deteriorate, 29% do not expect any changes. As to price, 8.3% think that it will fall, 56.9% envision an increase, and 8.5% do not expect any changes. The comparison between quality and price expectations shows that 30.6% of those who envision a quality improvement think that it will be accompanied by price decrease, 41.8% expect a price increase, and 17.9% do not expect any price changes. Of those who expect quality to deteriorate 96.4% think that price will increase. Of those who expect quality to remain the same 0.9% expect price

[21] For more information about the qualitative changes in employment in the electricity and gas sectors due to the restructuring in the European Union read the report *The Effects of the Liberalization of the Electricity and Gas Sectors on Employment, http://europe.eu.int/comm/energy/library/ecotecfinalreport.pdf*

Figure 3: Households' Expectations for the Impact of Privatization on Electricity Service Quality

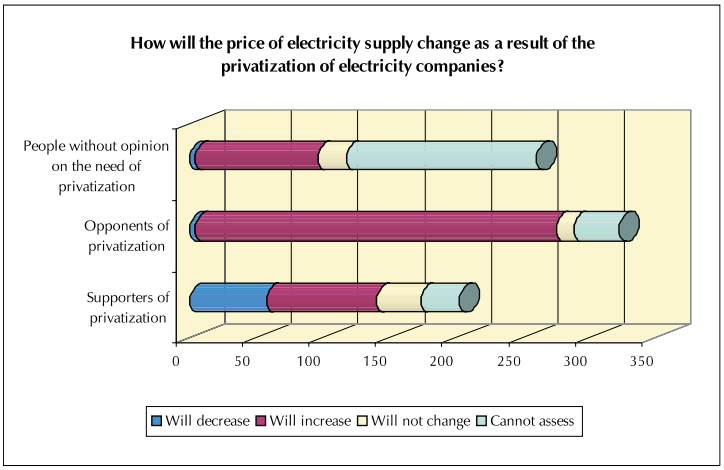


Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001.

to decrease, 80.2% expect it to increase, 12.8% do not expect any change. Special attention is to be paid to the fact that over a half of the supporters of privatization expect service quality to deteriorate and price to increase. Such an expectation contradicts the elementary market logic and implies that these respondents view privatization in the electricity sector as an end in itself, as something inevitable, which they have accepted.

Those who think that the quality of electricity supply will improve typically have above average incomes, enjoy an elevated position in the social hierarchy, live mainly in the capital, and are between thirty-five and fifty years old. Respondents who think that it will not change typically have below average incomes, low social statures, and high school educations. They often live in rural areas and are typically under twenty-five years of age. Those without an opinion are typically at the bottom of the social hierarchy with very low incomes. They too live in rural areas where they are often engaged in agriculture and are over seventy-five years of age.

Figure 4: Households' Expectations for the Impact of Privatization on Electricity Prices



Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001.

People with the lowest income and social statures, living in rural areas, with primary or secondary education, farmers and workers in commerce, at the age of between of thirty-six and fifty years dominate the respondent group which expects price increase. Respondents who do not have a definite opinion on the issue typically have no educations, below the average incomes and low social statures. Most of them are at the age of more than seventy-five years, reside in rural areas and are employed in agriculture. Consequently, future efforts to inform those unfamiliar with the privatization process should be directed above all to the above-mentioned target groups, with efforts made to take into account their peculiarities.

6. Conclusions

The general framework for the reforms in Bulgarian electricity has been developed but there is still more to be done with regard to the preparation of the organizational restructuring and privatization. It is plausible that the social tolerance of the reforms was one of the milestones in the development of this framework.

Figure 5: Organizational Restructuring and Privatization in the Bulgaria's Electricity Sector from the Perspective of Consumer Protection

Strengths

- Availability of a general framework, assuming socially responsible reforms
- Spinning-off of the separate activities and their establishment in separate companies
- Availability of normative and regulatory grounds for concluding contracts between suppliers and consumers
- Progress towards introducing clear terms in the electricity supplies
- Start of a dialogue between suppliers and organizations, representing the interests of consumers

Weaknesses

- Incomplete framework for privatization in the sector
- Lack of experience in the regulation and competition in the electricity sector
- Highly limited competition in the sector
- Lack of trade contracts between suppliers and consumers
- Non-market behavior of suppliers and consumers
- Lack of stimulus for educating market culture among consumers and suppliers
- Lack of social support for the sector privatization

Opportunities

- Implementing and abiding the new terms of the relationships between consumers and suppliers
- Establishment of independent companies - brokers, dealing with electricity supply
- Intensifying the dialogue between the supplying companies and consumers
- Transition from the single buyer to a regulated access to the market /market liberalization for big consumers
- Price reform, accompanied by measures to ensure the tolerance of electricity bills
- Carrying out of scaly explanatory campaigns

Threats

- Unsuccessful privatization
- Inappropriate regulation of the relationships in the sector
- Lack of measures, ensuring social tolerance of the reforms
- Lack of any change in the attitude of consumers towards electricity supplies
- Lack of any behavior, orientated to consumers, of the electricity supplying
- Lack of any dialogue between suppliers and consumers
- Lack of awareness, understanding and support on the part of consumers about the ongoing reforms

Reforms in the sector are already taking place though progress has been slow. The consequences for consumers have been limited to changes in price. Concerns about security, quality and affordability of electricity supply are related to the future developments in the sector.

Future stages in the restructuring and privatization of the sector must be characterized by fairness to all participants, openness to their input, and transparency because of their social significance. The transition period provides a unique opportunity to inform consumers and to educate both them and suppliers in a more market-oriented behavior.

The degree of awareness among Bulgarians regarding reforms is currently low. This causes uncertainty and a negative attitude towards the changes. Consumers have expressed an interest in the reforms and a campaign should be undertaken to satisfy their need for information to support the building-up of an active stance and positive attitude towards the reforms. The experience, both positive and negative of other countries with such reforms should be an important element of this campaign. Special attention should be paid to the timely provision of information to the most vulnerable groups and the procedures for the reliable protection of their rights and interests.

The reorganization in the electricity sector is significant for any Bulgarian. Any mistakes in the restructuring carry the risk of transforming the state monopoly into a private monopoly, which is maybe the most unfavorable alternative. Another important problem concerns the social tolerance of reforms given the low living standard of many Bulgarians, the thorough restructuring of the national economy and tight budget restrictions. In other words, the ultimate goal of the reforms shall be rendering reliable, qualitative and affordable services to electricity consumers under normal market conditions.

CAPACITY OF THE STATE ENERGY REGULATORY COMMISSION TO ENSURE THE PROTECTION OF THE RIGHTS OF ELECTRICITY CONSUMERS

The European Union requires its members to provide effective mechanisms to guarantee electricity supply as a public service. Although competition has the potential to eventually lead to improvements in service quality and decreases in prices, this does not automatically occur at the beginning of the transition from a monopolistic to a competitive market. This requires the establishment of regulatory bodies, which will create an environment that encourages the achievement of these goals without interfering in the daily activity of energy companies.

The objectives that regulatory agencies must strive for include:

- Protecting consumers from violations of their rights by companies with a large market share;
- Encouraging investments while simultaneously protecting investors from government interference;
- Promoting economic efficiency in the sector.

Most EU Member States have established regulatory bodies that are independent of both corporate interests and daily political control though this independence is not explicitly mandated by the Directive 96/92/EC.

The successful establishment and performance of the regulatory body in the Bulgarian electricity sector is directly related to the protection of the rights and interests of consumers. During the transition period certain market agents may be tempted to take advantage of their monopoly position by increasing prices or not supplying to sparsely populated and remote regions or to low-income consumers. The regulatory agency has an important role to play in preventing such abuses and correcting them if they occur.

1. Establishment of a Regulatory Body in Bulgaria

Structural changes in the Bulgaria's energy sector, the desire of the government to put the sector on a competitive basis and to gradually withdraw from both the ownership, subsidizing and investing predetermined the need of a body to regulate the sector as an independent institution. With the approval of the Energy and Energy Efficiency Act (EEEA) in the middle of 1999 the normative conditions necessary for the establishment of the State Energy Regulatory Commission (SERC) were created. The Commission itself was established in the autumn of the same year with the Council of Ministers' Decree 181 (September 10, 1999).

The members of the regulatory body should be appointed as early as possible before assuming their functions to be able to get acquainted with their new responsibilities, to pass through adequate trainings and to ensure the preparation of its policies and direction. During this initial phase the regulatory body should expand competence in technical, economic, financial, and legal aspects of the energy sector, as well as in public relations and negotiations. According to Richard Green[22] , the preparatory work necessary to prepare price regulations in the utility sector for instance takes approximately two years. SERC had to assume its responsibilities in price regulation at the beginning of 2002 but the two-year preparatory period turned out insufficient for the adoption of legislation. Since the Ordinance on the Formation and Implementation of Electricity Prices and Tariffs was adopted hardly in early 2002 SERC assumed its functions in this regard in the midst of March 2002.

SERC is composed of experts with a wide range of relevant expertise. This forms a good basis for the establishment of a functioning and competent body. Unfortunately, during the formative training as a part of the regulatory agency little attention was paid to the social consequences of the reforms in the electricity sector. The dominant concerns during the preparatory period were technical questions relating to the restructuring itself as well as the corporate aspects of the reforms. Only in recent months has the effect of the reforms on households become a subject of a more thorough analysis and discussion.

The regulatory body should use the adaptation period to establish connections and relations with organizations and institutions in the country and abroad. With regard to

[22] Green R., *Utility Regulation - A Critical Path for Revising Price Control,* Public Policy for the Private Sector, Note No. 127, The World Bank

the rights and interests of consumers this entails establishing contacts and possibilities for dialogue with the state bodies involved in the energy sector, social policy, competition, consumer protection. These include the State Agency of Energy and Energy Resources/the Ministry of Energy and Energy Resources, the Ministry of Labor and Social Policy, the Commission for Protection of Competition, the Commission for Trade and Consumer Protection, as well as companies subject to regulation, and non-governmental associations representing consumer interests. Progress in this area has been limited to the distribution of functions in the energy sector between SERC and the former State Agency of Energy and Energy Resources and to the establishment of relations with companies concerning licensing arrangements.

The SERC's relation with international organisations provides some hope that the organisation will eventually prove itself capable of meeting its social obligations. For example, the SERC's participation in the Energy Regulators Regional Association (ERRA) for Central and Eastern Europe[23] is encouraging because it facilitates the exchange of experience and information with countries undergoing similar reforms. The Association is a voluntary organization of the energy regulatory bodies in the region and its goals are to improve energy regulations in its Member States, to a large extent by encouraging collaboration and the exchange of experience among them. Within the Association information about regulatory practices in Central and Eastern Europe in pricing, licensing, performance monitoring, quality control, etc. is exchanged.

2. Independence of SERC

We define independence of a regulatory body as *a distant relationship with political authorities and private interests subject to regulation and availability of the attributes for the organizational autonomy, necessary to ensure that distant relationship and to develop the necessary expertise for the body's successful performance*.

The independence of the regulatory body is a guarantee that all parties to electricity supply will be treated equally. It should be a guarantee for electricity consumers that prices are fairly formed and not influenced by political, economic or corporate interests, that electricity supply will be dependable, that performance of public service obligations will be impartially monitored and corrected.

[23] www.erranet.org

In the European legislation the independence of the energy regulatory body is not required. In practice however, most EU Member States have established independent regulatory bodies. One of the proposals of the European Commission for amendments to the Directive 96/92/EC from March 2001 was the introduction of a requirement for the independence of regulatory bodies. The Commission proposed that pricing and the definition of rules for access to the network be included in the competences of regulatory bodies. According to it this would introduce new guarantees that market rules in energy sector will not be violated. In the Commission's revised proposals from July 2002 only the explicit requirement for independence of regulatory bodies from corporate interests has remained.

Warrick Smith summarizes the following formal criteria, which are obligatory preconditions for the independence of the regulatory body[24] :

- Clear obligations for its members that are incorporated in legislation and are not subject to government's control.
- Preliminary defined requirements for the professional qualifications of regulatory body members.
- Participation of both the executive and legislative power in the process of appointing the regulatory body members.
- Clearly defined length of the appointment of regulatory body members, which is not be subject to governmental interference.
- Overlapping terms of regulatory body members that do not coincide with those of governmental bodies.
- Exclusion of the regulatory body from the rules for civil servants that would prevent it from attracting and retaining highly qualified specialists.
- Ensuring reliable sources of financing to the regulatory body consisting of fees collected by agents subject to regulation.

The overview of the SERC's status according to these formal criteria shows that there is a relatively good but not sufficient ground to ensure its independence.

[24] Smith, W. *Utility Regulator - The Independence Debate,* Public Policy for the Private Sector, Note No. 127, The World Bank, http://www.worldbank.org/html/fpd/notes/127/127summary.html

The SERC's functions have been specified in the EEEA and have been elaborated in the Statutes of the State Energy Regulatory Commission and Its Administration. These Statutes are subject to the approval of the Council of Ministers, which offers some concern about possible interference by the government.

The professional qualifications required of SERC members have been defined in the Article 13 of the EEEA. They have been reduced to a minimum: the SERC members must have university degree and at least ten years of work experience, of which at least three years in the field of energy, and must not be sentenced. As the requirements are related to a certain degree of education and certain duration of the general and special experience, they fall entirely within the framework provided by the Administration Act. The Statutes of SERC do not set further requirements though the Administration Act establishes such a possibility. A positive step in achieving the SERC's independence is the requirement that its members be not directly related (are not employees) to energy companies.

SERC members are appointed for five-year terms by the Council of Ministers. Consequently, these appointments depend on the political party in power. The balance in the Bulgarian system is achieved by the different duration of terms of the initial regulatory body members. When the SERC was established in 1999 the term of two of its members was set at two years, two other members were appointed for three-year terms, while the rest received five-year terms. Thus, in December 2001 two of the SERC's members were replaced due to the expiry of their terms. This implies that only two politically biases appointments can be made. At the same time, the SERC's decisions require a majority of at least two thirds of its seven members, i.e. at least five of them must support a proposal to become a decision.

The terms of the SERC's members last for five years, while those of the legislative and executive power last for four years. Again, the formal condition for the independence of the regulatory body is fulfilled.

SERC's members and their teams are civil servants and respectively all regulations concerning civil servants in general, including remuneration, are applicable to them.

SERC is a state body subjected to the Council of Ministers. Initially it was a second

level budget-spending unit and its budget was drawn up, approved, and overseen by Ministry of Regional Development and Public Works. With the 2001 amendments to the EEEA SERC became a first level budget-spending unit. This was an important step in distancing it from the government's control. These amendments however do not provide for SERC to use a part of fees collected from regulated energy companies for financing of its activities. If SERC is given the authority to use a portion of licensing fees on companies operating in the energy sector, a high degree of autonomy and independence from the political sphere will be ensured.

3. Human Resources of SERC

SERC is a relatively young institution, still in the process of its institutional establishment. Though it had been created in the autumn of 1999, it started assuming and efficiently performing its functions at the end of 2000. Replacements of SERC's members turn to be one of the significant obstacles that prevent a more rapid assuming of the functions. In May 2000 five of the seven SERC's members appointed in the autumn of 1999 were replaced although their terms had not expired. In 2001 another four members were replaced, some of them because of the expiry of their two-year terms.

Apart from making it difficult for SERC to establish itself, the replacements slowed the process of accumulating experience and expertise, and in part, endangered the consistency sought in the Commission's policies.

The competences and the number of the SERC personnel are other important characteristics that predetermine the ability of the regulator to cope with its functions. There is not a universal rule to determine the relevant number of the regulator's personnel. Understaffed personnel rob the regulator of the ability to perform its tasks. Overstaffed personnel create conditions for "dilution" and shifting of responsibilities and increase costs.

According to the SERC's Statute, the Commission should employ seventy-eight people, of which sixty-three were appointed by fall 2001[25]. Although its personnel increased in recent years, SERC still does not dispose of the necessary human resources to ensure its normal functioning. The timely recruiting is an important precondition for

[25] See the Regular Report of the European Commission for Bulgaria's progress in the accession process 2001.

the SERC's successful operation because Bulgaria lacks practice in regulation of natural monopolies and time is needed to develop expertise in the field.

To some extent the SERC's inadequate expertise can be compensated through the use of external consultants in compliance with Article 11 of its Statutes. Such a practice is provided for not only in Bulgaria but also in other countries all over the world. While attracting external consultants SERC should be aware that the former counsel and recommend but it is the regulator that takes the final decision and assumes the responsibility for it. Thus, if an external consultant recommends for example a new structure of household electricity supply prices, SERC must ultimately decide whether to apply the recommendations given the sector development and the social considerations. In addition, external consultants are not necessarily disinterested parties to the energy sector. As a result, their recommendations may favor certain private interests and breach the principle of equal treatment of all agents in the sector.

In order to fulfill precisely its regulatory functions the regulatory body must be competent in a wide range of fields including economy, finance, social policy, engineering, and law to name a few. Experience in transition economies demonstrates that people with this much expertise are in short supply and often prefer the private sector because of the possibility of greater remuneration than is available in the public one. It is largely for the retaining of well-qualified, trained, and competent personnel that SERC's employees are to be exempt from the salary restrictions that apply to other civil servants. Bulgaria has not applied such a measure yet. Some progress was achieved in late 2001 when the amendments to the EEEA allowed SERC's employees to receive additional remuneration. This has been an important first step in attracting and retaining qualified and competent personnel to the Commission and in encouraging more efficient performance of the regulator.

4. Functions of SERC

The governing principles of SERC include, among the others, such that relate to consumer protection, e.g. to ensure a balance between interests of consumers, suppliers and producers, and to ensure that prices reflect only economically reasonable costs.

The SERC's mandate is defined in the EEEA and includes the drawing up of draft

secondary legislation, the preparation, issuance, and review of permits and licenses, price regulation, and control over the performance of obligations specified in the legislation and in the individual licenses. With regard to household electricity consumption, the SERC functions concerning the definition of the license terms and the control over their compliance, the approval of the general terms and conditions in the contracts for sale of electricity, and affirmation of prices are especially important. In performing these functions SERC must guarantee a reliable, high quality, and affordable electricity supply to the population.

One of the main issues confronting the Bulgarian energy sector in recent years concerns the allocation of functions between SERC and the State Agency of Energy and Energy Resources, whose successor is the Ministry of Energy and Energy Resources (MEER). MEER has to create and implement the governmental electricity policy, including to determine sector priorities and the general directions for its development. It must also consider the need for new capacity for satisfying domestic electricity demand and actively participate in attracting strategic investors. With regard to households the Ministry must determine the measures necessary to ensure energy security and the satisfaction of society's electricity needs. SERC is in turn responsible for the regulation of the relations in the sector. Otherwise the assumption of independent regulation will be broken.

Prior to privatization MEER will act as owner of the state assets in the sector, including the seven large electricity distribution companies that enjoy regional monopolies over electricity supply to households. If at the same time MEER regulates the relations between suppliers and consumers, there will be an imbalance between the interests of parties to electricity supply as the Ministry is interested as a proprietor of suppliers. Consequently, SERC must be delegated formulation of requirements to energy companies and control over their compliance in order to protect the rights and interests of households.

Another interesting aspect of the allocation of responsibilities among institutions concerns the implementation of social policy, especially with respect to electricity price increase for households. Until the approval of the Ordinance on the Formation and Implementation of Electricity Prices and Tariffs, household electricity prices were

determined by the Council of Ministers. The Ordinance divided this responsibility between the electricity distribution companies and SERC. SERC became responsible for ensuring that all households paid the same prices. SERC also began to oversee whether costs are indeed related to electricity supply and are within reasonable limits. During the transition period, while the electricity price for households climbs to the level covering the cost incurred for low-voltage supply, SERC must propose increases to prices on an annual basis, according to a schedule prepared in coordination with the International Monetary Fund.

Electricity price increase for households must be accompanied by the implementation of measures for the protection of vulnerable consumers. This is beyond the competence of SERC. This is why SERC must work with other institutions such as MEER, the Ministry of Labor and Social Policy, the state institutions responsible for competition and consumer protection, consumer associations, and trade unions.

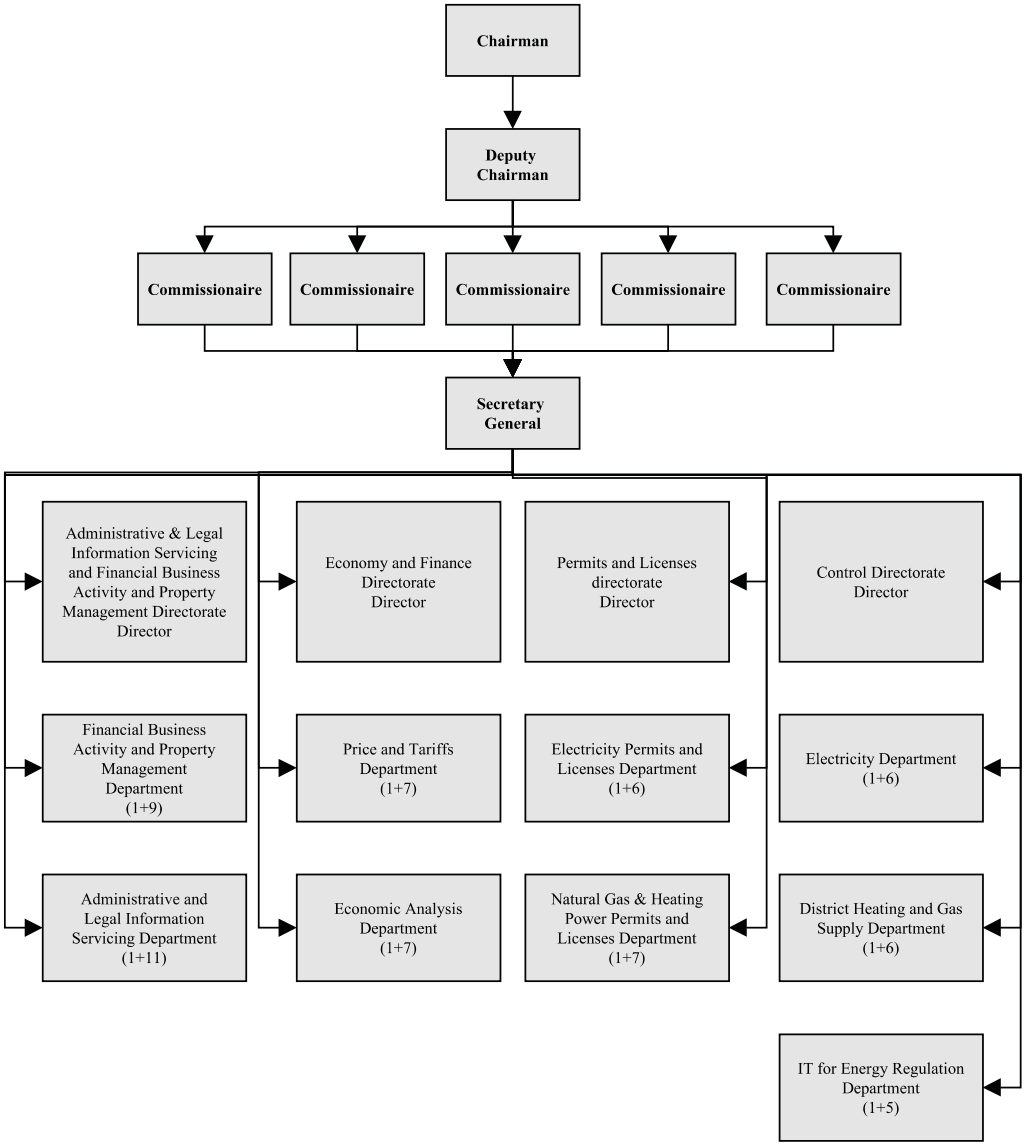
5. Structure of SERC

In structural terms SERC has a general and special administration, divided into three directorates (see Figure 6). None of its units is directly responsible for consumer protection, though the functions of the special administration include issues that directly concern the protection of consumer rights. In addition, each directorate has the legal jurisdiction to protect consumer rights.

The Economy and Finance Directorate is competent in the field of forming electricity supply prices. It is responsible for researching and analyzing the pricing rules and the influence of prices and tariffs on the electricity sector, for preparing proposals regarding the rate of return of electricity companies, and for affirming electricity supply prices. While performing these functions, the Directorate is able to guarantee fair and affordable prices of electricity supply to consumers.

The Permits and Licenses Directorate carries out all activities related to the licensing process, including subsequent amendments, and the supplement and termination of licenses. It is within the competence of the Directorate to include in the licenses of electricity companies requirements for electricity supply in remote regions, performing public service obligations, and ensuring electricity supply to vulnerable consumers,

Figure 6: Structure of the State Energy Regulatory Commission[26]



Source: State Energy Regulatory Commission, www.dker.bg

[26] The figure in the bracket shows the number of the personnel in each unit

including the elderly, infirm, and impoverished.

The Control Directorate has the widest competence with regard to guaranteeing the rights and interests of end-users, because it controls compliance with the requirements formulated in the licenses, the maintenance of the quality and security of electricity supply, price formation, and application.

6. Mechanisms of SERC for Protecting Electricity Consumers

SERC disposes of an array of mechanisms, with which to regulate the relations between households and their electricity suppliers and to guarantee the rights and interests of both.

By *issuing licenses* to electricity distribution companies SERC may impose concrete requirements on these companies to render services of a certain quality. By issuing licenses SERC may also oblige electricity distribution companies to perform certain functions, ensuring quality, regularity, and security of electricity supply. Under the present organization of the Bulgarian electricity market, only the regional electricity distribution company may supply households with electricity. As such, it is the regulatory body that must prevent abuses and ensure quality and security. In this regard, SERC is entitled to impose additional public service obligations on energy companies. Costs incurred will be recognized as operational costs of these companies and will be included in price. It is through the imposition of such requirements that electricity may be reliably supplied to all households, including those in remote and/or isolated regions.

Another means, through which SERC may guarantee the rights of consumers, is by *approving electricity supply prices* for the regulated consumer groups. SERC is responsible for determining whether costs proposed by suppliers reflect the value of the service offered, as well as for determining an acceptable profit margin.

Thirdly, by *exerting control* over electricity companies SERC must ensure that the former live up to their commitments and meet their assigned responsibilities and to apply sanctions in the event of non-performance. While controlling and announcing the findings SERC provides guarantees to households that their interests are protected and that there are working stimuli for protection of their rights.

7. Popularity of SERC in the Society

In addition to establishing relations with the private sector and other government agencies, during the first years of its existence the SERC must establish links with the public and increase society's awareness of its purpose and activities.

The establishment of the regulator and its functions are still unpopular in the Bulgarian society. To date, less only 7.4% of the public is even aware of the SERC's existence. It should be noted that SERC's establishment is the least popular among the four reforms in the Bulgaria's, whose popularity in the society was tested within the *Impact on Reforms in Electricity Sector on Consumer Protection Project* (see Figure 2). The low awareness undermines the SERC's effectiveness in representing consumer's interests. This fact is further supported by the national survey within the above-mentioned project, which demonstrated that only 1.5% of the population would turn to SERC with an electricity problem.

The lack of enough information must be offset by more clarity and transparency about the Commission's authority, decision and actions and more information about the requirements, with which the electricity distribution companies shall comply. SERC must play a leading role in improving the public's awareness of itself and its activities as well as of reforms as a whole. Greater awareness of the changes taking place in the electricity sector would lead to an increase in public support for reforms.

8. Conclusions

The establishment of regulatory bodies in energy is a part of the reform in the sector, which has spread over all European countries. Efficient mechanisms for regulation and control in the sector are crucial to ensure proper functioning of competition and a balance between the interests of all market players.

The analysis give us grounds to conclude that, in terms of regulation, formal preconditions for ensuring fair and affordable prices and qualitative electricity supply to households are available. As the regulatory practice in the Bulgaria's electricity sector is too short, it is impossible to assess to what extent these formal preconditions can indeed ensure good protection of interests of all market agents.

Efforts to split SERC from Bulgaria's political powers have been important steps in securing its independence. However, more work is necessary to ensure that neither the private sector nor unforeseen government meddling later undermine this independence.

It bodes well that the MEER has stated that current legislation is inadequate for ensuring the SERC's independence and that it will maintain the latter as a priority in formulating new legislation for the sector. This new legislation is currently being elaborated and is expected to be adopted by the end of 2002.

With respect to its human resources SERC is still building the necessary capacity to be able to protect the interests of electricity consumers. Having its full complement of qualified staff in a short term would take the SERC a long way towards achieving its goals and should be a top priority. Preconditions for the improvement of human capacity of SERC include recruiting of more specialist with large expertise, training and better motivation of the regulator's personnel and attracting external experts with sound experience in development and implementation of regulatory mechanisms for protection of electricity consumers in a transition period.

Functions delegated to SERC provide for good protection of electricity consumers without disturbing the market or showing discriminatory attitude to electricity suppliers. SERC is able to impact upon price policy in the sector, which is the most sensitive element of the reform in the sector.

The SERC's structural units have the authority to ensure the protection of consumers' rights and interests. These units have yet to exercise this authority however. Changing this is one of the largest challenges currently facing both SERC and the development of the sector as a whole.

Finally, it should be noted that the role and influence of the Bulgaria's regulator will intensify from now on. The SERC's efficiency is key to ensuring the success of reforms. SERC's strengths and opportunities suggest that it may be successful in achieving public support and social affordability of the transition to market relations in electricity supply.

Figure 7: Features of SERC Related to Consumer Protection

Strengths

- Established contacts and good opportunities for exchange of information with countries at a similar stage of reform
- The functional capabilities of SERC to guarantee the interests of households without disturbing the equality of all participants on the market
- Availability of mechanisms to guarantee the interests of households
- Availability of competence at all structural units to protect the interest of consumers

Weaknesses

- Delay in the capacity establishment and affirmation of the role of the Commission among Bulgarian institutions
- Insufficient communication with the remaining institutions, competent in protecting the interests of consumers
- Shortage of highly qualified staff
- Lack of solid experience in regulating the relationships between market agents
- Low public awareness of the existence and activity of the Commission

Opportunities

- Harmonization of national legislation with the norms of the European Union
- Use of the best practices from transition countries and EU member countries
- Affirming the independence of the Commission on the basis of the already present formal preconditions for its autonomy
- Clear division of the functions and competence of the separate institutions in the energy sector
- Desire of the public to receive more information

Threats

- Unfavorable conditions for motivating and retaining the qualified staff
- Strong financial dependence on the political power
- Abilities of the political power to influence the regulatory body

THE IMPACT OF PRICE ON THE AFFORDABILITY OF ELECTRICITY TO HOUSEHOLDS

1. General Principles of Electricity Price Formation

One of the main challenges to most regulators today is to create an adequate regulatory framework leading to an increase in economic efficiency, to introduction of competition and to improvement of service quality.

Wherever electricity prices are subject to regulation, regulators usually attempt to establish fair prices through two principal means. The traditional approach is called cost-of-service regulation, while the more advanced approach is known as price/revenue cap regulation.

Cost-of-service regulation protects shareholder returns, thereby reassuring investors. The main problems with this type of scheme are that it removes incentives to improve efficiency and encourages over-investment.

Price/revenues cap regulation is designed to overcome this drawback. Under this regime the regulatory body sets an initial maximum price, at which the utility can sell its service. The goal is to imitate the performance of a competitive market where the seller cannot raise his price above that of his competitors without losing so much market share that the price rise becomes unprofitable.

The price/revenue cap should not be altered every time the utility's costs change. Otherwise stimuli for cost optimization would become non-working. To avoid this problem, a price/revenue cap formula is typically fixed for a three- to five-year term. In a competitive market, changes in costs, including those that result from improvements in technology, are often transferred to consumers. To imitate this process, the price cap is usually indexed to the consumer price index and annually adjusted to reflect the expected rate of efficiency improvement. The resulting price must not increase in

nominal terms by a greater margin than the consumer price index less the predicted rate of efficiency improvement. If a utility improves its efficiency faster than the predicted rate, its profits will increase and it will be able to distribute higher dividends to its shareholders. Separating the price cap from actual costs in this way provides incentives for utilities to innovate and cut costs in a way that is lacking in a cost-of-service regulatory regime.

The price/revenue cap method is currently widely used in the energy sector. It provides good incentives to cut costs and thus prevents consumers from facing unreasonably high costs in a sector where modern society makes it almost impossible to refuse the service being offered. The price/revenue cap method reawakens however worries about failing to provide an adequate rate of return especially for new investments. To allay these fears price/revenue cap is typically set at a level sufficient to cover not only operating and maintenance costs but also a good rate of return on both inherited capital and new investment.

2. Electricity Price Regulation Framework in Bulgaria

According to the Energy and Energy Efficiency Act (EEEA) price regulation in the energy sector must be carried out on the basis of objective, non-discriminatory criteria that ensure the balance of economic interests of energy companies and consumers.

Until January 1, 2002 the consumer prices were determined by the Council of Ministers. The Ministry of Energy and Energy Resources in turn regulated prices between independent power companies alongside the value-added chain in compliance with price formation norms approved by the Council of Ministers and with principles stipulated in the EEEA.

According to Section II, Chapter III of the EEEA, the Council of Ministers was required to adopt an ordinance with methodological guidelines for price formation in the electricity sector and SERC had to implement it as of January 1, 2002. The first methodology was adopted by the Council of Ministers in April 2000 as part of secondary legislation to the EEEA. Due to some deficiencies found during the period of the experimental implementation of this ordinance, SERC made significant revisions and proposed to the Council of Ministers a completely new methodology incorporated in

the Ordinance on Formation and Implementation of Electricity Prices and Tariffs ("the Ordinance") that came into force on March 7, 2002. During the transitional period between January 1, 2002 and April 1, 2002 temporary rules for the formation and implementation of electricity prices and tariffs were in force in accordance with the Decree №298 of the Council of Ministers.

The Ordinance incorporates the price/revenue cap regulation approach for a given regulatory period and thus, encourages improvements in efficiency rather than extensive investments. The methodology provides consumers with certain guarantees for reasonable prices as it envisages only costs necessarily incurred within the performance of the regulated activity to be covered. Because these costs are not clearly defined however these guarantees are not sufficient. Primarily because of this lack of clear definitions in the Ordinance, the Supreme Administrative Court declared some of its provisions to be illegal[27] .

The Ordinance also allowed prices to cover only the return on those assets that are used for the generation, transmission, and distribution of electricity. The rate of return is determined by SERC to correspond with the levels in countries, sectors and companies with a similar risk rate. The goal is to attract investors to Bulgaria and to ensure the health of the sector and through this, the security of supply.

The Ordinance provides for electricity companies to submit proposals for changes in the set prices prior to the end of the regulatory period depending on the inflation rate, their efficiency coefficient and the exchange rate dynamics. Companies will take advantage of this right only if they derive a benefit from the changes. At the same time SERC may not initiate such changes if, for example, the exchange rate changes lead to a dramatic decrease in the costs of energy companies.

It should be noted that the Ordinance is in force only for those cases in which buyers are not eligible or do not exercise their right to choose their supplier. With the first step of the liberalization of the electricity market in Bulgaria all customers with an annual consumption of at least 100 GWh will be given the opportunity to freely negotiate

[27] In its decision dated July 18, 2002 the Supreme Administrative Court declared illegal Art.13, Para.2, Item 5 of the Ordinance, which allowed for "other costs that are not dependent on the quantity of generated electricity" to be included in the fixed costs of energy companies. The Court's decision states that the text of the provision contradicts the requirement of the Normative Acts Law, which requires provisions of normative acts to be formulated in Bulgarian, in brief, clear, and precise terms. In addition, the Court argued that Art.13, Para.2, Item 5 of the Ordinance is not an objective criterion for determining the availability of capacity price and end-user price respectively. As a consequence the Court held that Item 5 contradicts the requirement of the EEEA that requires the use of objective and non-discriminatory criteria that ensure a balance between the economic interests of energy companies and consumers.

prices with independent power producers. Given that the household electricity market is only expected to open in 2007, prices for this consumer segment over next years will be formed in conformity with the Ordinance.

Consumer prices are dependent on the performance of all companies in the sector, including those engaged in generation, distribution, and transmission. That is why it is worth reviewing the major issues in the price formation at each of these levels.

With regard to *generation* the Ordinance deals with:

- Availability of capacity, which is linked to the ability of the each generation plant to make available to the transmission system operator capacity to generate electricity. Regulated costs for availability consist of fixed operating and maintenance costs and provisions for reasonable investments.
- Provision of electricity, which is associated with the ability of each generation plant to produce electricity at the request of the transmission system operator. Regulated costs for electricity provision consist of fuel costs, material costs, and other variable operating and maintenance costs.

The availability price is subject to a cap during the regulatory period and thus companies are encouraged to restrict their fixed costs and to improve their availability. With regard to the price for the provision of electricity, no incentives have been provided at this initial stage.

Proposals for availability and electricity provision prices are prepared by power producers and submitted to SERC. SERC approves or rejects the proposed prices on the basis of the principals stipulated in the EEEA and the methodology and procedures envisaged by the Ordinance. In this way SERC exercises control over the costs incorporated in the prices and is able to prevent any boosting of selling prices by generation companies with, for example, unreasonably high increases in labour or repair expenses, or with the incorporation of investments that are not directly related to electricity generation.

Furthermore, generation companies can provide auxiliary services whose price they negotiate directly with the transmission or distribution companies. Given that these services incur costs for other companies involved in electricity supply, there it a threat

for unreasonable price increase that is likely to be transferred to consumers.

An incentive for optimization of costs is incorporated in the Ordinance requirement for the transmission system operator to perform economical planning and dispatch for the electricity network while maintaining secure supply requirements. That is, while purchasing electricity the operator gives priority to generators with lower selling prices.

The price of electricity sold by the *transmission company* consists of:

- Capacity price, which covers costs related to securing production and transmission capacity, and maintenance costs, including investments.
- Electricity price which includes costs incurred for the purchase of electricity, auxiliary services, and losses in transmission.

The costs of securing capacity and for the purchase of electricity are beyond the control of the transmission company. Therefore, setting a cap on its selling price at the beginning of the regulatory period provides incentives for it to increase its own efficiency and to reduce transmission losses through upgrades and repairs.

With regard to market liberalization the Ordinance introduces an electricity transmission tariff for contracts between independent power producers and an eligible consumers. The tariff consists of a capacity charge, electricity charge, and system services charge. It is designed to reflect the costs related to electricity transmission, technological losses and auxiliary services. While optimizing the costs that it can directly influence on, the transmission system operator is able to increase its profits as the transmission tariff is fixed at the beginning of the regulatory period.

From the perspectives of households, electricity prices for which do not accurately reflect their value, it should be noted that the Ordinance provides for transitional price formation. This transitional period will last until the average electricity sale price to households reaches the level of costs of low voltage supplies. During this period part of the profits from electricity exports and sales of electricity to consumers connected to the transmission network will be used to cover costs related to sales of electricity to distribution companies. The aim of this approach is to ensure a smooth transition to higher electricity price levels for households.

The electricity price charged by *distribution companies* includes all reasonable costs (including a return on assets) for distribution, supply and auxiliary services. SERC approves operating and maintenance costs, distribution losses, an asset base, and a rate of return. In conformity with the Ordinance electricity distribution companies should present to SERC a statement of costs allocated to network maintenance, to its development, and to end-user supply. Hence SERC controls costs for activities related to secure system functioning and reliable electricity supply to consumers. Consumer prices are proposed by all electricity distribution companies and are subject to SERC's approval. They are in force for the entire regulatory period.

Tariffs, at which distribution companies sell electricity to households, are uniform across the country, despite the difference in service costs by regions. This decision reflects social considerations, such as ensuring affordable electricity costs to rural areas where incomes tend to be lower.

Similar to price formation at the transmission level, the Ordinance provides for a transitional period at the distribution level until prices cover the cost incurred for household electricity supply. The formula determining the price for households during the transitional period allows cross-subsidizing with revenues generated from non-household customers. Again, this approach facilitates the smooth transition to higher price level.

Household prices are differentiated according to the time of day. The tariffs will increase during the transitional price formation period in accordance with the average selling price of the electricity distribution companies.

Further improvements of retail pricing mechanisms are necessary to more accurately reflect service costs for different consumer groups. As a first step distribution companies must be split into two internal businesses: the distribution network business, undertaking the distribution network functions; and the power sales business, carrying out the supply functions.

Another important issue concerns how to help the poorest households who are unable to pay even their current electricity bills. One possible approach is the scheme, introduced on July 1, 2002, under which tariffs increase with the amount of electricity

consumed. The scheme is self-funded insofar as consumers with higher electricity consumption pay a subsidy to those with a lower level of consumption. It is unclear however why larger consumers should pay higher rates instead of the contrary which is normal in an open market.

3. Price Setting Mechanism

Aiming to establish incentives for efficiency and more predictable regulations, SERC has adopted the price/revenue cap method described above, where appropriate. The duration of the regulatory period for which the cap is in force is not explicitly determined in the Ordinance and SERC may determine it on a case-to-case basis. It is recommendable that the regulatory period last between three to five years, for the effects of the price and revenue regulation to be achieved. The following two exceptions should be taken into consideration:

- When a new market model is introduced, the duration of the regulatory period should be restricted to one year for price regulations to adapt more precisely to market performance.
- In the event of a new generation project, the regulatory period should last longer and should correspond to the project payback period and to the respective duration of any long-term power purchase agreements that have been signed.

Prices may be updated annually to reflect changes in rates of inflation and exchange rate. In these cases, improvements in efficiency that have been measured by a specially designed methodology of SERC are taken into consideration as well.

SERC approves prices and tariffs at different levels of the electricity supply chain based on input from energy companies regarding their costs and necessary revenues. The electricity distribution companies are required to propose a uniform household price. This must reflect the volume of expected sales, the costs of these sales, fixed costs, and the status and expected changes in the capital structure of the company. Because the companies prepare the proposals, which may be assumed to reflect their interests, SERC must act as an advocate of consumers' interests. In this role, it may take

advantage of the following rights that the EEEA and the Ordinance delegated to it:

- To collect any relevant information from the regulated companies;
- To seek written evidence from the regulated companies;
- To recommend penalties for breaches of the EEEA and the Ordinance;
- To require attendance of specified individuals from regulated companies at meetings with SERC;
- To commission relevant studies;
- To consult affected parties.

All the SERC's decisions are subject to appeal before the Supreme Administrative Court. This is a normal procedure addressing all acts of the state administration. The Court's current practice in this sphere is to make decisions exclusively with regard to formal observation of law.[28]

4. Price Effects of Liberalization in the EU

A competitive market requires a large number of end-users to be able to freely choose their supplier and to negotiate the terms and conditions of electricity supply, including the price. In order to encourage the establishment of a functioning electricity market within the EU, the Directive 96/92/EC introduces minimal thresholds for market opening for end-users in each Member State. The Directive does not impose an obligation for complete market liberalization. At the summit in Barcelona in March 2002, however, the liberalization of supply to all customers was one of the key issues, though a consensus on the deadline has not been reached.

Only in countries where the electricity market is fully liberalized can all customers, including households freely choose their supplier. As a result, direct effects on the prices charged to household can be expected only in these countries. Moreover, the

[28] In the autumn of 2001, the Confederation of Independent Trade Unions in Bulgaria and the Podkrepa Labour Confederation challenged the household electricity prices that came into force on October 1, 2001 in the Supreme Administrative Court. In its decision, the Court argued that the prices were not legitimate because the Labour Code requires that representative organisations be consulted on regulations affecting the standard of living, such as electricity prices. The Court also argued that the decision of the Council of Ministers for the household electricity price increase did not contradict the legally defined purpose of satisfying society's electricity needs. They argued that the aim of the law is not restricted only to the protection of life and health but includes also a balance between the interests of producers and consumers, improvement of energy efficiency, establishment of an energy market, securing investments, protection of the environment, and national security.

extent of such effects largely depends on the acceptance of new suppliers by households. In countries where the liberalization does not include households end-user price effects may emerge either because reduced generating prices are passed on to consumers or as a result of the application of price cap rules that also cover the captive market or both.

A comprehensive analysis of price effects shows that regulatory reform in the electricity sector not only has a direct effect on consumer prices but to the extent that electricity serves as an input to other sectors of the economy it also affects production costs. This triggers a number of indirect price effects such as lower prices of industrial products. In this way, fluctuations in electricity prices may be passed on to consumers.

In general, increased competition results in price reductions in the liberalized electricity industry. Competitive pressures lead to productivity gains and thus to lower costs. In addition, competition stimulates innovation which often also reduces costs through increased efficiency. The introduction of competition also affects the price structure, as tariffs across market segments (for example, industrial versus household consumers), are recalibrated to reflect costs more accurately. In some cases, price increases may be necessary, if power companies were to stop receiving public subsidies for example. Similarly, if only a portion of the electricity market is subject to competition, incumbents may try to use monopoly rents earned in the sheltered market segments to cross-subsidize electricity generation and supply in the competitive segment. If the regulator does not accurately perform its functions and obligations, power companies may unreasonably increase their prices for the regulated market and to ensure additional financial resources to cover their losses on the liberalized market. In these ways, both tariff rebalancing and cross subsidizing may result in partial price increases.

Another factor that affects electricity prices in the European Union is the creation of opportunities for cross border electricity trade between producers and suppliers of one country and eligible consumers in another country. Though this trade is still limited - accounting for only 8.0% of the total electricity generated in the EU in 2000 - it appears to be on the rise (from 6.5% four years earlier). This is encouraging, as cross border trade tends to lead to lower prices through increased competitive pressures on national suppliers, while forcing the latter to improve their price competitiveness in order to keep their customers and to enlarge their markets, including to perform successfully on external markets.

Table 2: Evolution of the Electricity Sub-Index of the Harmonized Index of Consumer Prices

Country	1996	1997	1998	1999	2000	% change between 1996 and 2000	% change between 1999 and 2000
Belgium	100.0	100.4	101.4	100.7	98.9	-1.1	-1.8
Germany	100.0	100.5	101.7	105.7	100.5	0.5	-4.9
Greece	100.0	101.5	104.9	97.1	91.3	-8.7	-6.0
Spain	100.0	98.9	98.9	96.2	92.8	90.6	-9.4
France	100.0	97.8	95.7	91.4	89.5	-10.5	-2.1
Ireland	100.0	101.9	102.9	102.9	102.9	2.9	0.0
Italy	100.0	96.8	98.4	94.4	102.2	2.2	8.2
Luxembourg	100.0	101.0	101.2	101.5	100.2	0.2	-1.3
Netherlands	100.0	102.9	103.6	110.7	128.9	28.9	16.5
Austria	100.0	102.7	102.7	101.9	101.4	1.4	-0.5
Portugal	100.0	101.0	102.4	97.6	97.0	-3.0	-0.7
Finland	100.0	101.7	102.3	99.9	98.8	-1.2	-1.1
Denmark	100.0	104.1	113.7	117.5	122.2	22.2	4.1
Sweden	100.0	106.4	109.8	104.9	102.2	2.2	-2.6
United Kingdom	100.0	95.2	90.9	89.8	87.9	-12.1	-2.1

Source: Price Effects of Regulatory Reform in Selected Network Industries, ECB, March 2001, http:// www.ecb.int/pub/pdf/mb200109en.pdf

Table 2 illustrates changes in the sub-index for electricity of the Harmonized Index of Consumer Prices (HICP) in the European Union. As of 1999 a downward price trend is observed in most countries. This can be regarded as the first impact that regulatory reform is having on electricity prices. In the United Kingdom the electricity sector was liberalized earlier than in the rest of the EU and the HICP sub-index for electricity shows a continuous downward trend since 1996.

Table 3 provides an overview of price levels in July 2000 for four different types of electricity consumers, defined in accordance with their consumption volume. It shows

Table 3: Price Levels of Electricity in the European Union in July, 2000 (EUR/ 100 kWh, net of taxes)

Country	Small-scale households (600 kWh annual consumption)	Large-scale households (7500 kWh annual consumption)	Small-scale industry (50 MWh annual consumption)	Small-scale industry (50000 MWh annual consumption)	Small-scale households/ large-scale industry ratio
Belgium	15.1	11.1	14.8	5.1	3.0
Germany	19.9	12.2	14.1	5.5	3.6
Greece	6.9	6.3	8.3	4.4	1.6
Spain	12.0	8.6	10.3	5.4	2.2
France	13.9	9.6	8.8	4.5[5]	3.1
Ireland	13.8	7.6	12.6	5.3	2.6
Italy	7.7	17.8	15.4	6.2	1.2
Luxembourg	21.0	10.2	13.1	4.4	4.8
Netherlands	14.8	11.8	9.8	5.1	2.9
Austria	13.3	11.1	14.1	5.6	2.4
Portugal	12.1	10.6	11.9	4.7	2.6
Finland	12.3	6.1	5.9	2.7	4.6
Denmark	24.3	14.7	6.2	4.2	5.9
Sweden	18.4	7.9	5.3	3.1	6.0
United Kingdom	20.1	9.3	11.5	5.3	3.8

Source: Price Effects of Regulatory Reform in Selected Network Industries, ECB, March 2001, http:// www.ecb.int/pub/pdf/mb200109en.pdf

that there are significant price differences between them. Prices for small private households are significantly higher than those for industrial users, and small-scale users pay significantly more than large-scale users, both in the household and industrial segments.

Table 3 also highlights significant price differences between the EU Member States. The main reasons underlying these differences can be summarized as follows:

- First, the differences are largely predetermined by the differences in primary

fuel prices, such as the cost of natural gas. The fact that different countries pay different rate for these resources is due to factors such as geographical proximity to their source and available means of transportation.

- Second, electricity prices reflect the underlying technology of electricity generation and the resulting mix of primary energy sources.
- Third, the different level of privatization in each country also contributes to price level differences.
- Finally, there are additional country-specific differences. The favorable evolution of prices in France for example, appears to be at least partly linked to the maturity of the French nuclear program of the 1970s.

In the future, differences in electricity prices between EU countries may trigger more intensive cross-border electricity trading that would in turn result in a more competitive market at the European level. This may lead to a higher degree of convergence of pre-tax electricity rates across Europe, particularly for large users.

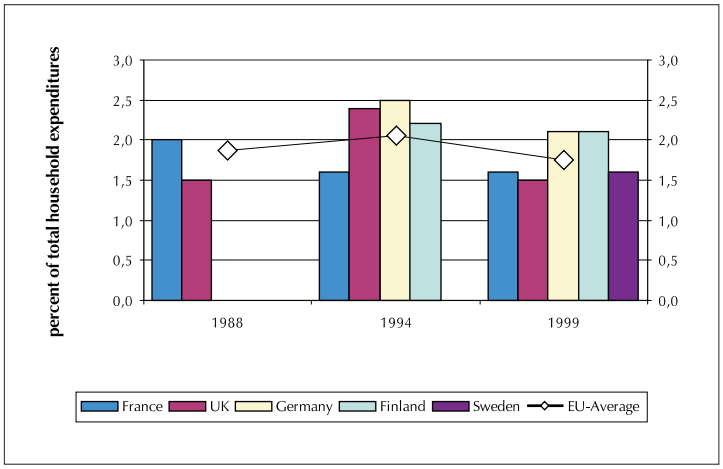
Electricity price changes affect household's disposable income both directly and indirectly. A study undertaken by EWI in 1997 concluded that within the household sector of the surveyed countries[29] , more than half of all increases in disposable income are attributable to indirect effects, i.e. to lower prices of other goods and services due to lower electricity prices for industry. This can be explained by the fact that although electricity often represents only a relatively small part of total household budgets, it is used in the production and delivery of virtually all other goods and services consumed by households.

Unfortunately, data regarding household expenditures on electricity is currently scarce or out of date. The available information reveals different patterns of changes in mean consumption expenditures for electricity (see Figure 8). As such, a general trend of the direct impact of liberalization on prices and the related effects on disposable income in the EU cannot be elaborated at this stage.

In France where the household electricity market has not yet been opened the share of household expenditures for electricity has decreased from 2% in 1988 to 1.6% in 1999. By contrast, in the UK, the share rose between 1988 (1.5%) and 1994

[29] Countries included comprise Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Portugal, and the UK.

Figure 8: Mean Consumption Expenditures for Electricity by Households in some EU Member States; 1988, 1994, 1999; %



Source: Data provided by Eurostat. The data are based upon a Household Budget Survey made every four - five years (1988/1994/1999).

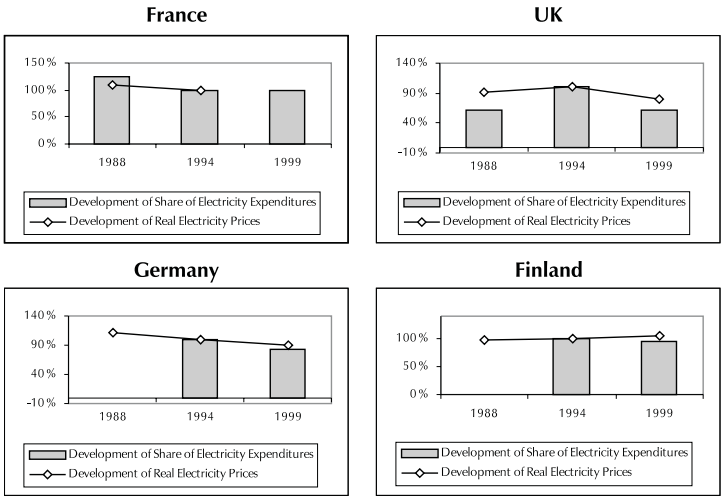
(2.4%), returning to its 1988 level again in 1999. This development can be attributed to the price changes (including taxes) after liberalization. The share of household expenditures for electricity of total expenditures in Finland has decreased, however compared to Germany, only to a lower extent. In both countries, household electricity markets are open to competition. The discrepancies in the share of household electricity expenditure may be related to:

- Differences in disposable income (EU-wide data is not yet available);
- Differences in electricity prices caused by liberalization and changes in taxation.

As we can see in Figure 9, electricity did not increase its share of total household expenditures in all countries between the observed times. The only exception is the UK, where the share rose between 1988 and 1994 due to the increased real household prices for electricity.

It is worth noting however that the decrease of electricity's share was always greater than the decrease in real electricity prices (in Finland, the share of electricity expenditures fell from 1994 to 1999, even though real electricity prices increased). The reasons for

Figure 9: Development of Real Household Electricity Prices (incl. taxes) and Share of Expenditures for Electricity of total Expenditures of Households in some EU Member States; 1994 = 100; %



Source: Own calculations of Institute of Energy Economics at the University of Cologne based on data of Eurostat.

this are either rising disposable incomes, or lower electricity consumption.

Finland demonstrates that a lower disposable income caused by higher household electricity prices may at least partly be offset by decreasing prices of other goods and services caused by lower electricity prices for the production sector (indirect effect).

5. Electricity Market Liberalization in Bulgaria

The actual liberalization of the electricity market in Bulgaria has not yet begun though it has reached the phase of regulatory preparation. For the time being, the market relations are subject to the single buyer model under which prices for electricity sale are subject to the approval of SERC.

The Government of Bulgaria declared in its program the development of a competitive energy market as a top priority in the energy sector. A new energy strategy has been adopted in order to speed up the reforms towards market liberalization and promotion of competition. The market liberalization and the competition in production and supply levels are related to expectations for:

- Cost reductions and restrictions of price growth;
- Improvement in the reliability and quality of supply;
- Transparent and fair allocation of the benefits of the market.

The first step of the market liberalization is for consumers with an annual consumption of more than 100 GWh, to be permitted to freely contract with independent power producers and to freely negotiate the prices of electricity supply. Households will not be part of the liberalized market at this stage and therefore will not be subject to any direct effects. Better prices for industrial consumers however will have effects on the whole Bulgarian economy, especially given its high-energy intensity. Thus, the effects for households will likely include:

- Reductions in the costs of Bulgarian industrial enterprises. In sectors with very intense competition this will lead to reductions in the prices of their goods and services on the internal market.
- The price competitiveness of Bulgarian enterprises, especially of those with high electricity consumption, will improve on the international markets without any quality deterioration. This will ensure increased employment opportunities, economic growth, and better financial provision of the social functions of the Government.

It should be noted that household prices will increase over the next years until subsidies are phased out. For example, costs for electricity supply to low-voltage consumers are estimated at 0.084 BGN/kWh[30] , VAT excluded, in October 2001, while the average household price is 0.067 BGN/kWh. At the same time high- and medium-voltage consumers pay higher rates than low voltage ones despite costs related to their supply are lower. The introduction of fair rates for each consumer group and the prevention of cross-subsidization are among the SERC's responsibilities. In the long run it can be expected that the ratio between prices for industrial consumers and households will reach one to three, as it is in the European Union.

The International Monetary Fund (IMF) has required the Bulgaria's former government to implement extensive price reforms in the electricity sector. The

[30] The figures are taken from the Energy Strategy of Bulgaria (2002)

Table 4: Real Tariffs for Electricity Consumers in Bulgaria, BGN/kWh, VAT Included

	As of 01.01.1999	As of 05.07.1999	As of 01.08.2000	As of 01.01.2001	As of 01.01.2002	As of 01.07.2002
Households						
Daytime	0.069	0.078	0.086	0.089	0.098	0.098/0.127*
Night-time	0.039	0.042	0.046	0.048	0.053	0.053/0.068**
Industrial consumers - high voltage						
Three-scale measurement						
Peak	0.128	0.128	0.122	0.122	0.122	0.122
Daytime	0.076	0.076	0.076	0.076	0.076	0.076
Daytime	0.076	0.076	0.076	0.076	0.076	0.076
Night-time	0.432	0.432	0.046	0.046	0.046	0.046
Two-scale measurement						
Daytime			0.098	0.098	0.098	0.098
Night-time			0.046	0.046	0.046	0.046
One-scale measurement	0.098	0.098	0.093	0.093	0.093	0.093
Industrial consumers - medium voltage						
Three-scale measurement						
Peak	0.138	0.138	0.137	0.137	0.137	0.137
Daytime	0.083	0.083	0.085	0.085	0.085	0.085
Night-time	0.048	0.048	0.052	0.052	0.052	0.052
Two-scale measurement						
Daytime			0.109	0.109	0.109	0.109
Night-time			0.052	0.052	0.052	0.052
One-scale measurement	0.105	0.105	0.104	0.104	0.104	0.104
Industrial consumers - low voltage						
Three-scale measurement						
Peak	0.162	0.162	0.163	0.163	0.163	0.163
Daytime	0.100	0.100	0.101	0.101	0.101	0.101
Night-time	0.576	0.576	0.062	0.062	0.062	0.062
Two-scale measurement						
Daytime			0.130	0.130	0.130	0.130
Night-time			0.062	0.062	0.062	0.062
One-scale measurement	0.124	0.124	0.124	0.124	0.124	0.124

** - the first tariff is paid for the first 75 kWh and the second tariff is applicable for the remaining consumption*
*** - the first tariff is applicable to households that are not equipped with central heating access during the heating period; the second tariff is applicable to all other households and periods.*

requirements were discussed at each review of the three-year stand-by agreement but there was not a political will for their implementation. One of the main aspects of these requirements was the increase in household prices. In 1998, upon consultations with the IMF, an action plan was adopted, where an incremental price increase was proposed. The plan was designed to equalize the average tariff rates for households and industrial consumers at 0.072 BGN/kWh. As can be seen in the table, those commitments have not been met.

The Energy Strategy adopted in April 2002 proposes similar incremental increases, which will have the following results:

- In 2002 the average household price will be raised to exceed the average price for industrial consumers.
- In 2003 the average household price will equal the average price for non-household consumers connected to medium and low-voltage network.
- In 2004 the average household price should cover the costs of supply at low-voltage levels.
- In 2005 household price should be set in accordance with the cost-plus method.

Incremental increases in electricity costs will be tied to so that to facilitate the transition to higher prices for households. Nevertheless, there are still concerns whether households will be able to afford the projected price increases. That is why the new strategy proposes the introduction of protective social tariffs to ensure that electricity for covering basic needs remains affordable.

6. Affordability of Electricity Supply and Social Policy

Public Opinion and Expectations

Electricity networks are comparatively well developed in Bulgaria and from a technical point of view the service is accessible to everyone. Price affordability depends very much on the tariff levels and households' income. If tariffs are quite high compared to the level of households' income, payments collection decreases, causing financial

troubles to electricity suppliers. If tariffs are quite low and do not reflects the costs of generation, transmission, and distribution they send misleading price signals to consumers. This in turn leads to inefficiency, electricity waste, and difficulties in meeting demand.

This is confirmed by the national survey within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* which demonstrated that with relatively low electricity prices, 22% of those surveyed used electricity for heating, with over 20% of them having switched in the last five years. Less than 2% of the others indicated likelihood to make the same change, perhaps because of the coming price hikes.

Approximately 70% of those surveyed spent up to 40 BGN per month on electricity during the winter and half this amount in the summer months. More than half of the respondents stated that their bills for electricity are high or too high given their budget constraints. These findings are not surprising given the level of households' income and respondents' forecasts about economic situation in the country and their own financial status. Just over 10% believed that Bulgaria's economic situation was improving, with only a fraction of these (8%) believing that this would lead to improvements in their own economic situations during 2002. 70% considered their own financial status bad or very bad, with 66% considering their social status to be low or very low. 65% declared their combined household income to be below 300 BGN.

Very low household income is the main problem in terms of affordability of electricity. Despite these indicators, electricity prices will likely increase significantly as the reforms to continue cross-subsidies need to be eliminated. Effectively addressing this issue is one of the greatest challenges that the government and the SERC will face in the coming years.

The difficulties that households meet with regard to their electricity expenses make them apply different measures for controlling their bills. The most frequent means (in 85% of the cases) that households apply in reducing their electricity bills is to economize on their consumption. This implies that the upcoming price increases will introduce effective stimuli to limit electricity waste. For instance, more than half of those surveyed claimed that they experience difficulties meeting the 10% increase in electricity prices that took effect on October 1, 2001. 58% of the respondents stated an intention to

reduce their consumption in the event of a further 10% increase, climbing to almost 84% in the event of a 20% increase.

Social Policy

The implementation of market reforms in the sector is undermined by electricity prices for households, which fail to reflect the actual costs of the electricity's generation, transmission, and distribution. These unnaturally low prices are the result of cross-subsidies from industrial consumers. Phasing out these subsidies while replacing them with some sort of assistance program for vulnerable consumers is critical for ensuring the success of the current reforms.

Reforms in energy sector always are governed by economic motives. The strong economic focus tends to overshadow the social policy with the hope that the social problems will be solved once the competition is introduced.

As a part of its efforts to join the EU Bulgaria must apply measures to meet the priorities of the European policy. Guaranteeing the right of any person to receive electricity of high quality and at an affordable price to satisfy his or her basic needs constitutes one of these priorities. Consequently, the reforms in the Bulgarian electricity sector must be accompanies by measures for social protection of vulnerable consumers.

To date, the social issues raised by the reforms have been paid extremely limited attention by the government which has dedicated only the scarce resources available within the system for assistance to low-income households. This system failed to provide adequate and efficient protection. With regard to the heating aid, the system's shortcomings are mainly related to the insufficient amount of the aid, the incorrect inclusion of child aid in the income basis for clustering eligible households, and the opportunities for using energy aid for other purposes.

The Ministry of Labor and Social Policy is working to overcome these problems with a new program whose main features are:

- *A 21.5% increase of the maximum amount of social aid for heating* to 45.38 BGN monthly. This is designed to fully compensate low-income households for the increase of 20% in electricity prices and of 11.4% in central heating prices.

- *Aid for heating will be increasingly targeted with respect to the energy resources used*, to better reflect actual costs for heating.
- *Ensuring that the basic energy needs of all Bulgarians are satisfied*. For instance, the monthly, targeted aid for the poor is equivalent to 450 kWh of electricity. According to ministerial experts, these quantities are enough to cover the basic energy needs of the population.
- *Paying the full amount of energy aid to all eligible households*. To date, only 45 % of eligible households received the full amount. The change will relieve the budgets of the rest eligible households, allowing them to direct additional funds for the purchase of other goods and services.
- *Changes in the calculation of household income for the purpose of clustering those eligible for aid*. Assistance for children (in accordance with the Family Aid for Children Act) and allowances for children (in accordance with the Protection, Rehabilitation and Social Integration of the Disabled Act) will not be included as a part of the income of households. This will protect the right of households to use the aid in accordance with their initial purpose.
- *Paying energy aid directly to energy companies* in order to facilitate their collection of payments and to prevent the use of the aid for other purposes.

The Ministry of Labor and Social Policy has calculated that during the heating season beginning in November 2002, about 650,000 households will be eligible to receive energy aid. This will result in a 23 % increase in the amount of aid required compared to last year[31] . This is the result mainly of low household income levels compounded by high unemployment in the country. The availability of funds to cover this increase must be ensured to satisfy the basic energy needs of households, including of electricity.

The new two-scale tariff scheme, under which certain electricity consumption is paid at a lower rate, can be regarded as a social protection measure as well. Its social orientation however is limited because it does not differentiate households according to their income or number of members. An example of the type of flaw that this system might generate is that a one-person household with a high income is more favored than a five-person household, consisting of one pensioner, two unemployed parents,

[31] http://www.government.bg/PressOffice/WeeklyBulletin/2002-07-15/2426.html

and two children of a school age.

Despite this potential problem, the scheme has the potential to encourage the adoption of waste reduction practices and more efficient technologies. This is especially important given that per capita consumption of electricity in Bulgaria is higher than almost anywhere else in Europe, while income levels are among the lowest.

7. Conclusions

The analysis enables us to summarize the strengths and weaknesses of the reforms in the Bulgarian energy sector from the perspective of their overall impact on customers, national economy and energy sector itself. The changes in the energy sector are complex and their impact on household tariffs must be considered within the context of the reform as a whole. The potential success of the reforms is directly linked to the way in which they are implemented and their negative impacts addressed.

The experience of the EU Member States demonstrates that both direct and indirect price benefits can be reaped as a result of electricity market liberalization. In Bulgaria, the direct effects will begin to be felt in the medium term at the earliest, while the indirect ones will take effect even in the short term. Before these effects take place however, it is necessary for prices to accurately reflect costs. The next thing that must occur is the enactment and implementation of a transparent and fair price formation law. SERC must likewise begin to efficiently perform its functions. Finally, both suppliers and consumers must be made aware of their rights and responsibilities in a reformed energy market.

Price changes affect all the consumers. As a result, the effects that reform has on affordability must always be taken into consideration. If tariff increases are not incremental, and does not accurately reflect real income and inflation, real dangers to society may materialize. Consequently, in the years to come both energy and social policy must be directed to ensure that electricity expenses account for an acceptable share in household budgets (especially during the heating season) and that each citizen receives enough electricity at affordable price to meet his or her basic needs.

Figure 10: Challenges to Electricity Price Changes with regard to the Affordability of Electricity Supply

Strenghts

- Correct price signals to consumers via reflecting price formation for electricity supply
- Incentives for efficiency improvement in electricity companies
- Better competitiveness of the Bulgarian economy and economic growth due to lower tariffs for industrial consumers
- Better conditions for supply as a result of the competition among electricity producers and of the opportunity to choose among suppliers

Weaknesses

- Lack of experience of both SERC and energy companies in application such a pricing system
- Significant increase in household electricity prices
- Lack of experience of market players in operating in a liberalized market that might initially result in inefficiencies and poor financial conditions of some companies

Opportunities

- Optimization of electricity consumption by households as a result of cost-oriented price formation
- Optimization of the utilization of the existing capacity and investments in new ones as a result of the commercialization and establishment of a competitive market
- Improvement of the operation efficiency, service quality and companies' management as a result of the privatization in the sector

Threats

- Unwillingness of some market players to take part in the initial stage of the market liberalization
- Threat to the security of supply in case of possible problems of energy companies due to lack of experience and lack of precise rules for the initial stage of market liberalization
- Unfavorable social consequences as a result of unreasonable price increases for households and inadequate social policy

QUALITY OF ELECTRICITY SUPPLY IN BULGARIA

The quality of electricity supply has many different dimensions, which may be classified into two main groups: commercial relationships between suppliers and consumers (herein referred to as service quality), and technical characteristic of the electricity supplied.

Economic theory states that there are perfect stimuli for changes in quality if prices change in accordance with the level of the supplied quality. Theoretically, there may be such correspondence between quality and price if we include a component, accounting for the quality level in the price formula. In practice, however, this is hard to achieve because of the relatively large number of quality indicators on the one hand, and the need to ensure at least minimum quality of electricity supply to consumers, on the other. This is why high quality is achieved through different mechanisms that are primarily regulatory. Among those, the most frequently used are:

- Service standards;
- Comparative analyses of electricity supply companies with regard to their compliance with the adopted standards;
- Reductions of tariffs or imposition of fines or other sanctions for non-compliance with standards. These sanctions are generally adequate to ensure compliance and are often paid to the affected consumers or deposited at special funds for financing programs which encourage improvements in service quality;
- Imposition of other sanctions to electricity suppliers such as written notifications, amendments to or even termination of their licenses;
- Introducing stimuli for the gradual improvement of electricity supply quality.

1. Service Quality

According to the current license contracts held by electricity distribution companies in Bulgaria, licensees are obliged to meet service quality criteria by planning, exploiting and developing the distribution network in compliance with network rules and in coordination with a plan approved by SERC. This plan specifies service quality indicators that govern activities of electricity distribution companies. The latter must develop and propose to SERC a plan for the annual monitoring and control of their service quality and of network development. The plan must be updated annually in coordination with SERC. After one year in operation as a licensed distributor, and after consultation with SERC, companies must specify binding indicators for service quality that will be in force until the end of the first plan. These indicators become an inseparable part of the license. Companies submit to SERC annual reports that describe the indicators used for license implementation and for ensuring the safety and security of the electricity distribution network and the service quality.

Relations between distribution companies and their customers are governed by general terms and conditions for sale of electricity. Article 80, para.1 of the Energy and Energy Efficiency Act (EEEA) stipulates that electricity distribution companies are not obliged to conclude individual contracts with household consumers. Rather, the electricity sale is governed by a set of publicly announced general terms and conditions proposed by the electricity distribution companies and approved by SERC. These terms and conditions define:

- The rights and obligations of the electricity distribution company and its customers;
- The procedure and manner of measuring, billing, and paying for the electricity consumed;
- The responsibility in case of non-performance of obligations;
- The procedure and manner of interruption and termination of electricity supply.

Any amendments to the general terms and conditions must be approved by SERC.

SERC may propose amendments to the general terms and conditions insofar as this is required by any law or by the terms of the license or if they are necessary for consumer protection. In this case SERC requires a written opinion on the proposed amendments by the electricity distribution company. If it does not receive a response within thirty days, the company's approval is assumed.

Paragraphs 5 and 6 of Article 80 of the EEEA stipulate that electricity distribution companies must publish the general terms and conditions approved by SERC at least in one national and one local paper. These become effective within one month of their publishing without a written approval from consumers.

Customers who wish to dispute these terms and conditions may submit alternatives to their distribution company within thirty days of their publication. Those offers approved by the electricity distribution company are registered in additional written agreements.

The general terms and conditions apply to all consumers equally. They include provisions which establish:

- The scope of the contract and rights and obligations of the parties;
- Conditions, procedures, and terms for interrupting the electricity supply;
- Obligations in case of electricity supply interruptions;
- Right of access to the network;
- How measuring, billing, and verifying meters will take place;
- A billing regime, including procedures and sanctions for non-payment;
- Conditions for interrupting electricity supply and its re-launching;
- Rights and duties in the event of non-performance.

Electricity distribution companies are required to place these general terms and conditions in a visible place in their offices and to enable consumers to receive a copy of them. Detailed information regarding electricity prices and tariffs must be presented to consumers. The electricity distribution company must also present detailed bills upon request. Regular bills must at least include the quantity of electricity sold, the unit

price, and the total amount due. Companies must keep relevant documents to be able to justify to consumers the amounts billed for electricity.

Article 80, paragraph 4 of the EEEA defines cases in which the distribution company may interrupt the electricity supply after having provided a preliminary notification to consumers. These are:

- If a customer has failed to pay his bill ten days after the deadline has passed;
- If a customer interferes with the functioning of their electricity meter or his consumption is not measured at all.

Article 237 of the Civil Procedures Code establishes how electricity companies may collect their dues.

Electricity distribution companies must have customer service departments with sufficient qualified staff.

Within six months of being issued a license electricity distribution companies must establish rules governing consumer relations and present them to SERC. These rules must at least contain the following information:

- Data on the work organization of the specialized unit, including its location, time schedule, working time for consumers, contact telephone;
- The terms and procedures for connecting consumers to the electricity distribution network;
- The minimum technical requirements for connecting installations or networks of consumers to the electricity distribution network;
- The terms and procedures for concluding contracts for electricity sale upon general terms and conditions;
- The terms and procedures for submitting complaints, requests, and proposals;
- The conditions for review, verification, and reply to complaints, requests and proposals.

After the rules for consumer relations have been coordinated with SERC they are

attached to the license and reviewed as a part of its conditions.

The electricity distribution company shall inform consumers about the consumer relation rules, and for the amendments to them:

- By publishing them in a national newspaper;
- By placing a copy of them where consumers are served (e.g cashiers desks);
- By presenting the latest version upon demand.

The electricity distribution company must review and, if needed, to amend its customer relation rules and the manner, in which they are applied upon requests from national or regional consumer associations.

Electricity distribution companies must reply in written to a customer complaint within a month of the date it is received. Failure to do so gives the customer the right to appeal to SERC provided that his or her complaint concerns denial of network connection, denial of a contract for electricity sale or denial of access to the electricity distribution networks. If, after receiving an opinion from the electricity distribution company, SERC deems a given complaint as reasonable it provides obligatory instructions**.**

Electricity distribution companies must ascertain a system for receiving and processing of complaints, requests and proposals. All the received ones and the replies to any of them must be kept for three years.

Electricity distribution companies must present to SERC an annual statement containing detailed information regarding:

- The total number of complaints, requests, and proposals during the previous calendar year;
- Classification of complaints, requests and proposals in categories such as: inability too satisfy requests for services, service quality, etc.;
- The manner in which complaints were dealt with;

With respect to the protection of consumer interests, electricity distribution companies are obliged:

- To ensure the protection of the interest of consumers and society, while performing its obligations and ensuring reliable, qualitative and continuous electricity supply in compliance with applicable legislation;
- To have long term investment strategies for the distribution network development to meet new demand and ensure the adequate servicing of existing customers;
- To develop the electricity distribution network in accordance with their business plan, their existing contracts, and the interests of society.

2. Technical Indicators for Electricity Supply Quality

From a technical aspect the electricity quality is determined in the Bulgarian State Standard BDS 10694-80, effective as of July 1, 1981. The Standard determines the following indicators for electricity quality for networks with alternating current:

- The frequency deviation and fluctuation;
- The deviation, fluctuation and non-sine curve of voltage;
- Non-symmetry of voltage and shift of neutrality upon three-phase voltage.

The most important electricity quality indicators to households are:

- In a normal mode the voltage deviation of all electric consumers should be within +/-5%, and for electric engines - from -5% to +10%. In after incident modes there can be an additional voltage decrease of 5%.

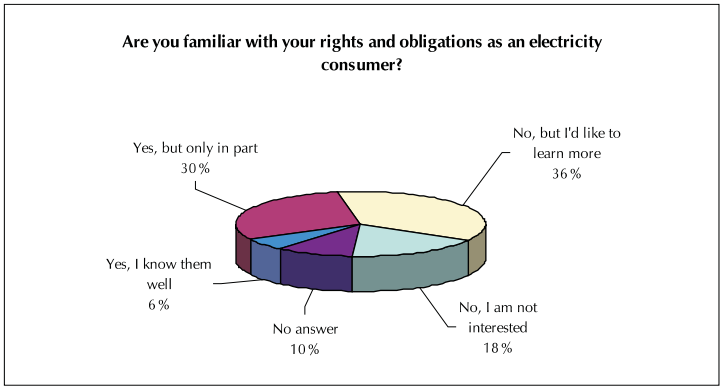
- In a normal mode when the system works independently the frequency deviation should not be greater than +/- 0.1Hz, while the energy system can temporarily work with a frequency deviation of +/- 0.2Hz

3. Households' Attitude to and Expectations for Electricity Supply

One of the most important conditions for efficient communication with consumers is their good awareness of their rights and obligations. Otherwise, the communication breaks and negative consequences for both suppliers and customers appear. Without enough information there is distrust and preconditions for frequent conflicts.

The survey within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* indicates that 6.1% of those surveyed know well their rights and obligations and 29.6% are only partly acquainted with them (see Figure 11). 64% are unaware of their rights and obligations. Of these 36.6% would like to receive such information, while 17.7% are not interested at all.

Figure 11: Awareness of Consumer Rights and Obligations among Bulgarians



Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001.

Similar results were obtained in an Internet survey carried out among the users of the economic portal www.econ.bg in February 2002. Only 16% of the respondents indicated that they knew their rights and obligations in full or in part, 75% did not know them but expressed a desire to become acquainted with them, while 5% either did not know or were not interested.

These surveys reveal a disappointing level of awareness of consumer rights among Bulgarians. This could seriously hinder the reforms through a negative public attitude to the changes as a result of the inability for proper judgment of the environment. Many Bulgarians however demonstrated a high level of interest in reversing this situation and the government should capitalize on this to a maximum extent.

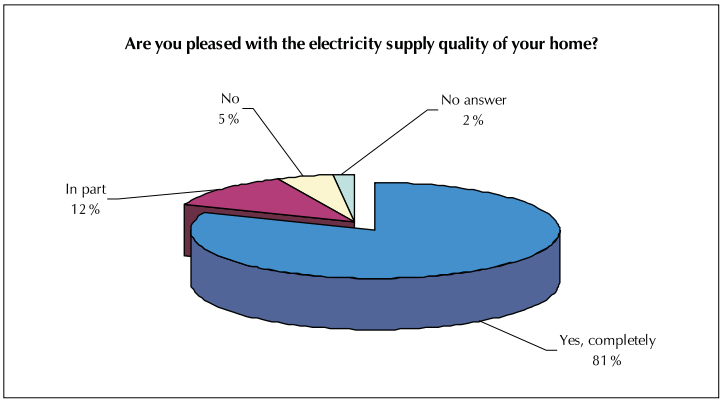
The reason for the poor awareness of consumers could be attributed to the fact that they do not know where to search for such information rather than to its lack. Almost half of those surveyed within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* (48.6%) would like to get informed but do not know to find information. At the same time a fourth of the surveyed (25.8%) stated that they are not interested at all. Almost one fifth do not know where to find information about their rights and obligations.

The information "vacuum" concerning rights and obligations is only a part of the unawareness of the Bulgarian society about the processes in the energy sector. The majority of those surveyed are not informed about the main aspects of reforms. The share of those who have never heard of these varies from 72.7% to 92.6% (see Figure 2).

The lack of information leads to confusion among consumers. Asked whether their consider the number of institutions protecting the rights of electricity consumers to be enough, 58.9% of those surveyed respond that they have not ever heard of such bodies. The number of these people is more than two times the combined number of respondents who answered positively or negatively to the question.

The vast majority of customers are satisfied in whole (80.9%) or in part (12.1%) with the technical quality of their electricity supply (see Figure 12). The share of consumers that are not satisfied with the quality of the delivered electricity is not insignificant (5.2%). Those consumers who are not satisfied or are partly satisfied with their electricity supply complain of frequent voltage changes (51.3%), lower voltage (32.0%) and interruptions to their electricity supply (41.3%). Approximately a third of all the surveyed claimed that damages resulting from a single interruption (such as spoilt food, damaged electric devices, etc.) cost them up to 100 BGN, and 2.4% - over BGN 100. 63.3% of respondents cannot assess their damages.

Figure 12: Households' Satisfaction with the Quality of Electricity Supply



Source: National Public Opinion Poll within the Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project, CED/ Vitosha Research, November, 2001.

4. Conclusions

Good regulations are provided in the EEEA, the license agreements for electricity distribution and the related to them documents to govern the relations between electricity distribution companies and their household customers. There are clearly defined obligations for providing information to consumers, receiving and processing consumers' complaints, and establishing departments to work with consumers. This provides a good normative environment in the relations between SERC, distribution companies and electricity consumers. The main problems are related not so much with the lack of qualitative documents and regulations but more with their inefficient application.

Technical problems in electricity supply do not concern a great share of consumers. Most households are pleased with the technical parameters of the delivered electricity. That however does not mean that they are aware of the technical requirements to electricity supply.

Surveys have demonstrated a low level of awareness among households of their rights and obligations as electricity consumers and of the restructuring of the Bulgarian electricity sector. Consequently, the public may appear to oppose the changes in the

sector. Therefore, there is urgent need that a purposeful campaign to inform consumers be undertaken.

Figure 13: Overview of the Quality of Electricity Supply to Households in Bulgaria

Strenghts

- Availability of a good legislative framework for the technical and commercial quality of electricity supply to households
- Incorporation of requirements to electricity suppliers with regard to consumers in their licenses
- Consumers' satisfaction with the technical parameters of electricity supply

Weaknesses

- Lack of general terms and conditions for contracts for electricity supply to households
- Low awareness of Bulgarians of their rights and obligations as electricity consumers
- Low awareness of Bulgarians of all aspects of the energy reforms
- Lack of knowledge of the relevant information channels
- Lack of practice in Bulgaria in regulating and encouraging the improvement of the quality of electricity supply

Opportunities

- Desire of the prevailing part of households to get acquainted with their rights and obligations as electricity consumers
- Conducting purposeful information campaigns among households
- Introduction of stimuli for electricity companies to continuously improve the technical and commercial quality
- Better awareness of the EU practices for securing the quality of electricity supply to households

Threats

- Further delay in the introduction of general terms and conditions for contracts for electricity supply to households
- Instability and frequent amendments in the regulatory framework for the quality of electricity supply to households
- Lack of improvement of the awareness of Bulgarians of their rights and obligations as electricity consumers
- Lack of customer-oriented performance of electricity companies

Electricity distribution companies must be stimulated to introduce new services. The latter are likely to improve the relationships among the market agents and to optimize companies' activities.

In sum, future efforts to improve consumer protection should focus on improving the transfer of information and rates of communication between the SERC, the electricity distribution companies, consumer protection associations, and consumers, rather than on making amendments to the legislative framework.

THE CAPABILITY OF CONSUMER ASSOCIATIONS TO PROTECT ELECTRICITY CONSUMERS IN BULGARIA

1. Legal Framework

The Consumer Protection and Rules for Trade Act, in force as of July 3, 1999, provides the main legal grounds for consumer protection. It stipulates the main consumer rights and rules for trade. It introduces the terms "consumer", "trader", "importer" and "producer" and defines their meanings:

- *Consumer* is any person, who acquires goods or uses services for his/her needs or for the needs of his/her relatives, and not for sale, production or practicing a profession or craft.
- *Trader* is any person, who sells or offers for sale goods or renders services to a consumer, producer or importer; the trader sells or offers for sale goods directly to a consumer.
- *Producer* is any person, who produces or renovates goods or parts of goods or offers services, extracts or processes resources or presents himself/herself as a producer by putting his/her name or company name, logo or other distinctive sign over the good, its package or the related to the good technical or commercial documentation.
- *Importer* is any person, who has first acquired the right of property over an imported good on the customs territory of the Republic of Bulgaria or has acted as an intermediary for acquiring such rights.

The Act serves as a basis for the institutional framework for consumer protection in Bulgaria. It creates consumer protection agencies, such as the Trade and Consumer Protection Commission (attached to the Minister of Economy), the National Council

for Consumer Protection (a consultative body also attached to the Minister of Economy) as well as consumer protection agencies at the municipal level. These bodies carry out the state's policies in the field of consumer protection. These consist primarily of exercising regulatory control over the market and developing normative pieces concerning consumer protection.

The Consumer Protection and Rules for Trade Act also creates rights and obligations for private (non-governmental) consumer associations. The latter constitute a separate category of organizations whose establishment and existence is voluntary and independent of the government. The government grants special rights and opportunities to these associations because of their international reputation for efficiency and importance. They are able to provide assistance to the government or even to free it of some of its functions. To exploit these rights and opportunities, an association must have at least 300 members and be registered as a non-profit organization whose mandate requires it to act in society's interest. The rights granted to the associations include:

- Access to draft legislation concerning the rights and interests of consumers;
- To inform controlling bodies as per Consumer Protection and Rules for Trade Act if consumer rights are violated;
- To approach the court if consumer rights are violated in pursuance of the Consumer Protection and Rules for Trade Act.

In addition to these general rights, associations may also make claims for the protection of the collective interests of consumer groups. In many cases this is the only form of protecting consumer rights.

In addition to the Consumer Protection and Rules for Trade Act, the Foods Act, the Technical Requirements to Products Act, the Vet-Medical Activity Act, the Tobacco and Tobacco Products Act, the Tourism Act, the Competition Protection Act and the Insurance Act play a significant role for consumer protection. With regard to electricity supply the Energy and Energy Efficiency Act and the secondary legislation in the sector also play important roles.

The existing legal framework incorporates the European norms for consumer protection, encompasses a wide range of consumer problems, introduces and

guarantees consumer rights and enables the representation of consumer interests. Nevertheless there is still not sufficient coordination between the separate elements of the legal framework. The latter can be improved through a better horizontal harmonization. This however should not imply incessant and unreasonable amendments because stability of the legislation concerning consumer protection is one of its major advantages so far. Foreign experience may be drawn upon here in order to improve the horizontal harmonization of the various entities. It should however not be adopted automatically because not always it is adequate for the Bulgarian reality.

Still, the level of familiarity with the legislation is insufficient. The lack of practice further threats the efficient protection of consumer interests.

2. Organizational Infrastructure

Consumer associations are civil non-government non-profit organizations, whose main functions concern the protection of consumer rights and interests.

Presenting information to consumers is one of their major functions. This includes making legislation accessible to people, presenting market information, and answering consumers' inquiries. Consumer associations also publish specialized journals that often include comparisons between products and services to help consumers make informed choices. Such information is also disseminated through monographs, brochures, and leaflets. The Internet has also become an important source of information in recent years. Associations supply consumers with information by publishing articles, participating in broadcasts, etc.

Providing support to consumers through consultations or direct assistance is another widely spread function of consumer associations. They typically act as intermediaries to resolve disputes in the latter case. There are three forms of intermediation - negotiations with a trader or manufacturer, participation in a reconciliation procedure (reconciliation commission) or assistance in court proceedings. In addition, associations may file with the court collective claims, whereby they represent the collective consumer interest. Consultations may be carried out on the phone, in person, in writing, by mail or e-mail.

Association *represent consumer interests* to state bodies involved in consumer protection policy or to business representatives. This includes assistance in drafting normative acts, in drawing up contracts with consumers according to general terms and conditions, and even in determining the long-term policy of the government or of private companies.

As of May 2002, there were nine unions registered with the Ministry of Economy, which comply with the formal requirements to be considered consumers associations under the Consumer Protection and Rules for Trade Act. Arranged in alphabetical order these are:

- *The Bulgarian Academy of Consumers* was established at the beginning of 2002. It has a presence in eight Bulgarian cities. The Academy publishes a catalogue of misleading labels on consumer products such as cooking oils and alcohol.
- *The Bulgarian National Consumer Association* was founded in 1998 and has 19 territorial sections in the country. It operates consulting services in Sofia, Plovdiv, Varna, Rousse, Shumen, and Vidin. It has designed Bulgaria's first web page designed for consumers. It is a member of the National Council for Consumer Protection, of the National Council of Standardization, and of the European Consumer Association. It participates in the activity of reconciliation commissions and publishes a bi-monthly bulletin and a number of specialized publications dealing with consumer protection issues.
- *The Consumer Centre for Data and Research* was established in 1998 in Plovdiv. It has one permanent and several temporary offices. It carries out training programs for consumers in unequal bargaining positions, such as gypsies, pensioners, and the deaf. It produces information pamphlets and participates in the activity of reconciliation commissions.
- *The Federation of Consumers in Bulgaria* was established in 1990 and disposes of eight regional offices. It offers direct assistance to consumers with complaints, oversees consumer issues in the food industry and also participates in reconciliation commissions. The Federation publishes a bulletin analysing consumer protection issues in Bulgaria and abroad, and the „Accreditation and Notification" bulletin. It also trains volunteers to counsel the public and

organizes seminars on food and quality issues. The organization is a member of Consumers International and of the Balkan Consumer Centre.

- *The Independent Union of Consumers in Bulgaria* was established in 1999. The Union is headquartered in Pleven but has territorial structures in the rest of the country. It has nine offices in Sofia, Burgas, Blagoevgrad, Varna, Dobrich, Lovech, Kurdjali, Pleven, and Yambol. The organization publishes a „Consumer Reference Book" and „European Directives Brochures". It participates in the activity of reconciliation commissions. It has links with the Association of Young Lawyers, the Retailers Union, the Union of the Blind in Bulgaria, the Bulgarian Chamber of Craftsmen, and the National Green Alternative Union. The organization has applied for membership at the European Consumer Organization (BEUC).
- *The National Association for Consumer Information and Advice to Citizens* was established in late 2001. It disposes of 10 advisory offices in Bulgaria. It assists consumers in different areas including public utilities, taxes and fees, alimentary and non-alimentary goods, and complaints. It produces and distributes bulletins on consumer problems and on challenges Bulgaria is facing for its accession to the EU.
- *The National Association of the Insured in Bulgaria* was established in 2000. Its activity is limited to protecting consumers in the field of insurance services.
- *The Regional Consumer Union'98* was established in Vidin in 1998. It participates in the activity of reconciliation commissions, and organizes training and information campaigns in Vidin and in the surrounding area.
- *The Regional Consumer Union* has offices in Plovdiv and Purvomay. It assists consumers in resolving disputes, participates in reconciliation commissions, and organizes consumer training programs for students.

The goals of all associations are similar and are focused on the protection of consumer rights and interests. The only association that states more specialized priorities is the National Union of the Insured in Bulgaria. It limits itself to the protection of consumer rights only with regard to the insurance services. The remaining associations aim at

protecting consumers in all areas and business sectors. That assumes that the protection of electricity consumers is not excluded from the significant directions and priorities of their activities.

Most of the associations have been established in only the last few years and are still busy acquiring experience, human and administrative resources, and funding. Only the Federation of Consumers in Bulgaria has a history of over ten years, which is a precondition for accumulated data and practice concerning the development of the electricity sector and consumer problems, generation and recruiting of expert potential, and developed capabilities for wider regional coverage.

One of the main problems to consumer protection in Bulgaria is the lack of complete national representation of consumer interests. Outside of the large urban areas, there is little active support for consumer interests. Even more, the predominant part of the opportunities for consumers to receive assistance, advisory and information are concentrated in Sofia. Consequently, a great deal of the population is deprived of the opportunity to take advantage of the services rendered by consumer associations. This problem is particularly acute in the electricity sector where many of the most vulnerable consumers are those that live in the rural areas with low concentrations of people. The media is the only forms for access to the associations' activities for people in settlements, where there are no active consumers structures. In this case, however, the communication is only in the one direction and limited in time, which makes it very lowly efficient.

Consumer associations want to expand their activities in the country and have the support of the local populations. To succeed this expansion they must raise the necessary finances, establish a constructive dialogue with local authorities, and explain their functions and capabilities to the local population.

Associations' experience in protection of electricity consumers is limited and sporadic mainly due to their short history and expert potential in the specific problems. We shall not underestimate the low dialogue culture in Bulgaria. That is the main reason for companies not to turn to associations for opinions and recommendations of mutual interest. In this regard the appearance of good practices deserves paying attention. At the beginning 2002, the Sofia Electricity Distribution Company presented its draft general

terms and conditions for the sale of electricity to consumers for public comment. Both consumer associations and state bodies participated. As a result, a considerable number of amendments were made to the draft, to the benefit of electricity consumers in Sofia.

It is important to note that according to sociological polls consumer associations are not much popular among Bulgarians. In the survey within the *Impact of Reforms in the Bulgarian Electricity Sector on Consumer Protection Project* only 1.3% declared that if their rights concerning the electricity supply are violated, they would turn to an association. The share of those who prefer to turn to the media is much higher (7%). The media can popularize a problem and accelerate its solution but are not legally granted opportunity to participate directly in its overcoming. The survey's results could be explained only with the low awareness of Bulgarians about consumer associations. This prevents consumers to a great extent from taking full advantage of the possibilities for collective protection and unifying. At the same time, low awareness robs associations of consumers' support which would make them strong and influential.

There are several ways that the service provided by consumer associations in Bulgaria can be improved. First, enough financial resource for their activities must be ensured. Potential sources consist of membership fees, international financing programs (for project implementation), subsidy from the state budget, and income from sale of information materials, training activities and consultations.

Second, associations' services may be improved by accelerating the training and skills development of associations' human resources. Both the government and associations can provide necessary training through seminars, conferences, and workshops. International experience should not be ignored and many international consumer associations could likely provide assistance in this respect.

Third, better coordination and collaboration among associations can only make them stronger. Because of their limited capacity and disunity they cannot affirm their place in the society, and that hinders their communication with administration and corporate agents.

Finally, it is crucial to the success of consumer associations to enjoy the support and trust of those they represent. This is directly related to the establishment of an active

consumer culture and to the defence of consumer interests.

In an institutional aspect, the consumer associations can conduct a dialogue with administrative bodies through the National Council for Consumer Protection, which is a consultative body subject to the Minister of Economy. The Council includes representatives from the Ministry of Healthcare, the Ministry of Agriculture and Forestry, the Ministry of Transport and Communications, the Ministry of Economy, the Ministry of Finance, and representatives of consumers associations. At present the following organizations are represented in the Council: the Bulgarian National Consumer Association, the Independent Union of Consumers, the Consumer Centre for Data and Research, the Vidin and Plovdiv Regional Consumer Unions, and the Federation of Consumers in Bulgaria. Unfortunately the Ministry of Energy and Energy Resources does not yet have a representative at the National Council for Consumer Protection, thereby reducing opportunities for a dialogue on the issues particular to electricity consumers in an important national forum.

The National Council for Consumer Protection:

- Makes proposals through the Minister of Economy for amendments to the laws governing consumer protection;
- Makes proposals to the state bodies for the efficient application of legislation for consumer protection;
- Gives opinions on draft legislation related to consumer rights.

The National Council for Consumer Protection provides an excellent forum through which associations may represent consumer interests to the government. Through it consumer associations can make proposals for legislative amendments, or improvement of the system for consumer protection, or harmonization of the consumer policy with the other state policies. Because the state energy policy is effected by MEER, the participation of its representative at the National Council for Consumer Protection will allow a better horizontal coordination of the energy and consumer policy.

Since the National Council for Consumer Protection has not a long practice, it experience is rather limited. Its role may become more significant in the future, given

that the government is indeed committed to ensure consumer protection and that consumer associations are effectively functioning.

3. Instruments for Consumer Protection and Their Application

Supply of Information

The dissemination of information by associations often has significant impacts on consumers' behavior and on the establishment of active consumer culture. Through providing specialized consumer information, associations support households to defend their rights and to be demanding. When first established, consumer associations focussed on disseminating information about the existence of consumer rights. This has evolved to include much more specific information, including ways of dealing with concerns and complaints. Associations do have ability to find and deliver specific information to consumers. In terms of electricity supply, they can disseminate useful information on consumer rights and procedures for their defending. To date, however, the experience of associations in providing electricity specific information is insignificant.

The primary constraint faced by consumer associations in this role is their lack of financial resources (for dissemination of free-of-charge information materials) and the limited capacity of the information market (for dissemination of non-free-of-charge materials). Media is the main channel they use for delivering consumer information. Predominantly, disseminated information is under the guise of news, thus insignificantly contributing to the formation of consumer culture.

Consulting and counselling

Consumer associations consult and advise individual consumers when their rights and interests have been breached (or when this has been perceived to be the case). This may take place over the telephone, through meetings, or through written advice (via mail or electronic mail). The advice that is offered is typically used to clarify legal rights and procedures.

Among all mechanisms of associations in Bulgaria, consultations are the most popular. They provide immediate contact with an expert in the field, often free of charge.

Consultations are often the first step that a consumer makes on the way to defend his or her rights. In many cases, this initial consultation is sufficient to resolve the customer's concerns. This is fully valid for consultations in electricity matters. Sometimes however associations may find it difficult to provide consultations, especially if thorough engineering knowledge and highly specialized expertise are required, and they do not possess such.

Efficient application of this mechanism for consumer protection is hindered by the unpopularity of associations, especially in smaller settlements. Consequently, there is a strong need to improve the awareness of consumers about their associations and to set up trust in their activity.

Negotiations with traders and producers

Negotiations are a very efficient means to immediately defend consumer interests with traders and producers. In general, they are used upon introduction or amendments to contract terms or upon settlement of disputes, whereby associations assist certain consumers. In Bulgaria however companies are not accustomed to the habit of negotiating contractual terms with their customers. For example, at the beginning of 2002 all the electricity distribution companies in the country drew up new contracts with consumers using general terms and conditions. Only the draft of the Sofia Electricity Distribution Company was discussed and amended in public. That eloquently shows that still the dialogue and collaboration among the business, state and consumers are not developed.

The lack of experience in negotiating with producers and traders is a main drawback of consumer associations because it does not foster the formation of specialists with proven expertise in this regard. It also feeds up distrust of consumers for their representative organizations. The establishment of precedents and improving the culture of dialogue between traders and consumers will bring benefits to both consumer protection and the image of suppliers in the society.

Court trials

Seeking the protection of the court is a last resort for consumers seeking to protect their rights for two reasons: First, the relatively high costs and time delays. Second, because courts are limited in settling the dispute that is brought before them. They cannot address the wider context in which the dispute occurred and can therefore rarely address the policy questions that a trial may raise.

Citizens or consumer groups may raise individual court trials. Trials may be collective as well, if a consumer association files a claim in the name of a large group. These claims are most often directed at unequal clauses in contracts with consumers or misleading and unfair advertisements. In the field of electricity claims against advertisements are exceptions because of the lack of the latter for the time being. Successful trials against unequal clauses have a huge effect on consumers. They result in a change to the general terms and conditions of electricity contracts and consequently, concern all consumers.

To date, only few such trials have occurred, mostly as a result of the ambiguity and uncertainty characterizing the relevant legislation. Once the general terms and conditions for electricity contracts are drawn up and are given legal weight, it is expected that much of this problem will be resolved. Other significant reasons include the low legal culture of consumers and their limited financial resources for covering the incurred costs. The latter strongly restricts the access to justice of a considerable part of consumers. In this regard associations can contribute by negotiating with companies upon drafting of general terms and conditions and by providing financial and methodical assistance to consumers in court proceedings.

4. Conclusions

The analysis gives us grounds to state that consumers associations in Bulgaria are provided with the formal preconditions to carry out their public functions and protect electricity consumers in the course of the sector reforms.

Problems arise mainly from weakness of associations themselves and less from disadvantage of the external environment. Insufficient financial and human resources

combined with limited experience and low degree of collaboration deprive associations of the possibility to be an efficient advocate of the interests of electricity consumers.

Practically, consumers associations are in a vicious circle. Neither are they popular in the society, nor have they proven their efficiency to consumers and electricity

Figure 14: Abilities of Consumer Associations to Protect Electricity Consumers

Strenghts	***Weaknesses***
■ High commitment to the problems of consumers ■ Legally guaranteed rights for protecting the interest of consumers ■ Wide opportunities for direct contact with consumers ■ Available mechanisms for protection of consumers ■ Institutionalized dialogue with the state administration	■ Lack of sufficient experience and practice in performing their functions ■ Low developed collaboration between the unions ■ Difficulties in communicating with the administration at all levels ■ Low degree of coverage on the territory of the country with active activities to protect consumers ■ Lack of financial resource for efficient work ■ Lack of sufficient specialized information and expertise in electricity ■ Low popularity among society
Opportunities	***Threats***
■ Desire to expand their activity in new geographic regions ■ Improving popularity and forming social trust towards the consumers unions ■ Improving one's expertise in the field of electricity ■ Establishment of precedent and accumulation of positive experience ■ Improving the culture of dialogue with the very unions and between the unions, corporate agents and state bodies	■ Continuous disunity and lack of collaboration between the consumer unions ■ Distrust and unpopularity among the consumers unions ■ Lack of financial and human resource for the consumers unions ■ Lack of dialogue or useless dialogue with the central and local officials ■ Insufficient dialogue with corporate agents

distribution companies. Consequently, households and electricity suppliers turn to them sporadically, thus preventing associations from accumulating experience and competence in protection of consumer interests in electricity supply.

Overcoming this vicious circle depends to a great extent on the will and efforts of the very associations. Measures that they can use are various. They can for example unite their efforts and establish a unit specialized in energy sector or in sectors that render services of general economic interest to consumers (telecommunications, energy, water supply and sewerage). More frequent production and dissemination of specific electricity information is another way, in which associations may improve their expertise and increase their popularity in the society.

Consumers associations can be efficient only if their counterparts, represented by electricity distribution companies, MEER and SERC, are willing to actively work with them. Their participation in decision-making would have a positive effect on all participants in the process.

CONCLUSIONS

For the past decade, an essential reappraisal of energy policy has been taking place. More specifically, a review of the government's role in the provision of energy services has been undertaken. Radical institutional, regulatory, and structural reforms are being carried out around the world with the aim of replacing highly regulated regimes with competition, and improving industrial efficiency and service quality. The countries where such reforms have been implemented are reaping significant benefits - both economic (reductions in costs) and social (shift of the savings to end users). At the same time liberalization of energy sector is part of the broader philosophy for modernization of the national economies and for free movement of goods and services.

Since 1999 the EU Member States have been making decisive steps towards the liberalization of their energy markets, while pursuing the common goal of establishing of a single competitive market. Their efforts are being coordinated by the EU which, through its documents, imposes requirements to ensure the attainment of this goal. Similar to all other accession countries, Bulgaria has to take these requirements into account in its preparation for joining the EU.

For many years the Bulgarian energy sector has been subject to a state monopoly and high subsidizing of household prices. Bulgarians started to perceive electricity supply not as a market service but as a social privilege that was guaranteed by the government. The former vertically and horizontally integrated state-owned monopoly company did not have stimuli to apply measures to improve its economic and technical efficiency as well as to establish normal commercial relations with its customers.

Under those circumstances structural reforms in the Bulgarian electricity sector were put many times off, thus making it too complicated for the government to perform

them and for the citizens to understand them. Each postponement increases the threat to the social affordability because it entails more radical changes. It threatens the security and efficiency of electricity supply as well because delays new investments and improvement in the governance of energy companies.

In recent years Bulgaria developed the framework for the restructuring of the organization and ownership in the sector. New legislation was adopted, new institutions were created, generation, transmission and distribution were separated. The core reforms however are still to be implemented.

The ongoing and upcoming changes pose the question of the affordability of electricity supply to many Bulgarians. They arouse concerns whether each Bulgarian, regardless of his social status, will be guaranteed the right to receive enough electricity of high quality and at a reasonable price to meet his minimal needs.

Bulgarians are mainly concerned with the price aspect of electricity supply, especially given the projected price increases over the course of the next years. It is worth noting that the basic reason for these concerns lies not in the price levels themselves but in the low income and high electricity consumption of Bulgarian households. As a result electricity expenses account for a significant share in household income, and new price increases pose serious financial difficulties for consumers. This is why urgent and targeted measures for decreasing the financial burden must be taken. It would be helpful if both governmental and non-governmental institutions redouble their efforts for improving the efficiency of household electricity consumption. Energy commercial entities may as well contribute to the alleviation of the financial burden of electricity supply by offering a wide range of new services such as short-term credits for consumers in winter and consultations on the application of energy efficient technologies and energy management. Special attention is to be paid to consumers with the lowest income standing in the society, as often they cannot cover even the minimal electricity expenses. Namely these households rather than all electricity consumers must the target of any energy social aid.

Both technical and commercial quality of electricity supply are not a major concern of Bulgarians for the time being. This situation is to be attributed not to the lack of any problems but rather to the significance of the price of the service. Adequate regulation

and control are required to ensure the quality of electricity supply in the years to come and to encourage companies to improve the servicing of their customers.

The three factors that ensure consumer protection - market competition, regulation, and representation of consumer interests - are almost unknown in the Bulgarian electricity sector and still cannot guarantee the interests of electricity consumers.

Competition on the electricity market is to be introduced in the months to come but only for the largest industrial consumers. Hence its impact on households over the next years will be indirect and under the guise of lower prices of other goods and services, higher competitiveness of electricity intensive industries, creation of employment, and introduction of market relations.

The incremental market opening brings the question whether companies will try to pass some of their costs for non-regulated consumers on to regulated ones, while striving for higher competitiveness. This threat makes the efficient regulation obligatory. The lack of experience in the country in the regulation of monopolies during the transition to a competitive market challenges the successful performance of the regulatory body. In addition, the efforts during the last years have turned insufficient to ensure a good environment for the SERC's performance. As a result, a number of unclear and non-transparent practices have taken place and have raised the distrust of Bulgarians in the fairness of the regulatory process.

Representation of consumer interests is not popular in Bulgaria mainly because consumer associations have not proven their efficiency, especially in terms of monopolies. As a result consumers seldom turn to these organizations, and companies and the government do not view them as a partner in their decision-making. The lack of enough and secure financing, human and financial resources, and expertise restricts the activities and efficiency of consumer associations. The concentration of the latter in large settlements deprives many Bulgarians of access to their services. With regard to electricity supply households without access are among the most vulnerable consumers.

The cooperation between companies, the government, the regulatory body and consumer associations is still making its initial steps. Its necessity is determined by its

capacity to prevent many future problems. In this respect, the participation of consumer associations in decision-making would have a positive effect on all participants in the process. SERC would have access to additional expert opinions. Electricity distribution companies would be more be aware of the opinion of consumers about discussed measures before the latter become effective and thus could avoid potential conflict by taking precautionary measures. Consumer associations would be motivated to get more deeply acquainted with procedures for electricity sale and to defend actively the rights of consumers. As a whole communication between the different agents would improve, most of the conflicts would be preventatively solved and end-users would receive services of better quality.

Finally, we should pay attention to the very low awareness of Bulgarians regarding the reforms, their necessity, advantages and disadvantages and their importance for both the national economy and the country's EU accession. In addition, households do not know their rights and obligations as electricity consumers. The lack of information provides for misunderstanding, fear of and opposition to the reforms. The low awareness of the existence and functions of the institutions involved in the protection of electricity consumers raises distrust in the former. Therefore, information campaigns and public surveys must be regularly held and all institutions must take active part in them. Information services must be delivered with priority to the most vulnerable consumers - the elderly, indebted, poor, and those residing sparsely populated regions because they feel mostly threatened by the reforms.

APPENDIX 1: PROTECTION OF CONSUMERS OF ELECRICITY IN SWEDEN

1. Development of Consumer Protection

Sweden was one of the first countries in Europe to implement an active consumer protection policy. Studies on consumer protection issues were first undertaken in the 1960s. These resulted in the creation of a public consumer ombudsman system in January 1971. The ombudsman was initially created to intervene against unfair business practices. Since 1976 however, he was given the additional responsibility to act against dangerous products and was appointed to the presidency of the National Board for Consumer Policy.

In the 1980s new measures for consumer protection were proposed. In 1986, the parliament passed a bill aiming at helping households to make the best use of their money and to strengthen their position in the market. In 1995, the government presented a new bill "Active Consumer Policy", in which the objectives of the Swedish consumer policy were highlighted[32] . Extra priority was given to consumers who are economically or socially vulnerable or who for some other reasons have special needs.

In 1999 the Swedish government created a Committee to study consumer protection policies for the 21st century. The Committee published its final report a year later. It made the following important recommendations:

- Obligatory establishment of local consumer advice centres in all districts;
- Establishment of a Ministry for Consumer Affairs in order to highlight the consumer and food issues in the government's work;
- Allocating more resources to the Swedish Consumer Agency for investigation and analysis work, and giving the Agency increased powers as well as the role of co-ordinator in developing consumer policy;

[32]Households shall be provided with the best possibility to use their economic and other resources in an effective way; consumers shall have a strong position in the marketplace; the consumers' health and safety shall be protected; and long-term sustainable consumption and production patterns shall be developed.

- Ensuring more public financing of consumer organisations;
- Enhancing consumer knowledge;
- Better means of dealing with advice and complaints, especially with regard to real estate and the delivery of electricity and telecommunication services;
- Extension of the Consumer Services Act to cover more services, especially in the deregulated industries.

The Committee's proposals were taken into account in the Ministry of Justice's publication of a new "Action Plan for Consumer Policy". The action plan proposed the following objectives:

- Consumers are to have a stronger position and more influence on the market;
- Households are to be able to use their economic and other resources efficiently;
- The health and safety of consumers is to be protected;
- Patterns of consumption and production are to be developed to reduce the burden on the environment and contribute to long-term sustainable development;
- Consumers are to have the right to good advice, information and education.

2. Institutions for Consumer Protection

Until 1988 the responsibility for consumer affairs was at the *Ministry of Finance*, later shifted to the *Ministry of Public Administration*. On the federal level, two ministries bear the responsibility for consumer protection. While the *Ministry of Justice* is responsible for consumer protection policy in Sweden and has created a separate department for consumer affairs, the *Ministry of the Interior* is responsible for the *Swedish Consumer Agency* (KOV).

The latter was founded in 1973 and is headed by the *Consumer Ombudsman*, who represents the collective interests of consumers in the market. Its activities mainly relate to advertising and contracts terms, consumer information and education, domestic

finances, product safety and quality, and environmental impact. Consumers may turn to KOV with complaints about traders, though KOV does not generally resolve individual consumer disputes.[33] Rather, the Ombudsman tends to use class action lawsuits to represent the interests of large groups of consumers before the Complaints Board (ARN), a specialized tribunal set up to deal with such matters. The Ombudsman can also bring lawsuits through the traditional court system and can create precedents through agreements with industry representatives.

The National Board for Consumer Complaints (ARN) is responsible for individual consumer complaints and settles disputes outside the court. ARN is a national authority directly responsible to the government (Ministry of Finance) and is currently the only extra-judicial body in Sweden. It is divided into 11 departments. It may be noted that complaints concerning electricity supply are dealt with by the Housing Department. The tasks of ARN include:

- To investigate conflicts between consumers and traders about goods, services or other utilities intended primarily for private use (consumer disputes) and to recommend solutions;
- To provide expert opinion to courts, upon request;
- To support the mediation role of local consumer organisations in consumer disputes, through training, advice and information;
- To inform consumers and traders of the Board's practice.

Municipal consumer advisors are a vital part of the consumer protection network in Sweden. The scope of each advisor varies depending on the financial situation and the political priorities of the municipality. Their main task is to provide advice, free of charge, to individual consumers. They may:

- Advise consumers on purchases;
- Inform them of their legal rights;
- Mediate in claim disputes;
- Monitor the local market;

[33] In financial matters, the ombudsman may represent individual consumer if the case will serve to test a novel principle or point of law.

- Work together with other local government bodies.

The staff of the municipal consumer advisories are trained and supported by the Swedish Consumer Agency.

In addition to the above-mentioned institutions, there are several *consumer bureaus* that deal with specific sectors (e.g. banking, insurance). In April 2002, a consumer bureau for electricity was founded in Stockholm.

3. General Procedure for Handling a Consumer Complaint

If a consumer is not content with a purchased good or service he must give notice to the trader as soon as possible. According to the Swedish Consumer Act, a trader is under obligation to address complaints and to rectify faults that are brought to his attention.

If a trader fails to respond to a complaint or if it is not possible for the consumer to achieve an amicable agreement with the trader, the consumer may bring the dispute to the attention of the ARN. This must be done within six month of the trader having completely or partially rejected the claim. The claim must have a certain value (€135 for issues concerning electricity). The ARN process is a purely written procedure. Special forms for notification are available at the municipal consumer advisors, at the Board, or at the Boards Homepage.

The Board's decision is typically a recommendation to the parties regarding how to settle the dispute. They are not legally binding and cannot be appealed. Nevertheless, approximately 75% of traders have undertaken to follow these recommendations. If unsatisfied with the recommendation, consumers may take the case to an ordinary court.

The ARN will normally consider disputes that involve:

- Any Swedish trader;
- Foreign traders with places of business in Sweden;
- Foreign traders if the agreement affecting the goods or services has been reached in Sweden;

- Foreign traders if the agreement relating to the goods or services has been reached abroad but the marketing took place in Sweden, the consumer lives in Sweden, and there is no reason to suppose that a recommendation will be simply ignored.

In 2001 the ARN received 105 complaints concerning the supply of electricity.[34]

4. Electricity Specific Consumer Protection

The Swedish electricity market was opened in 1996 with the Electricity Market Act. Major provisions of the Electricity Market Act include:

- Complete market opening as of January 1, 1996;
- Hourly metering requirements for customers wishing to switch supplier;
- Legal unbundling of generation and transmission as well as distribution and supply;
- Network access based on regulated TPA;
- Ex-post regulation by the Office of the Electricity and Gas Regulator, which is part of the National Energy Administration.

The use of hourly metering for household customers resulted in an absence of competition in the household sector. Consequently, the hourly metering requirement was abolished in November 1999. At the same time, the regulator stopped overseeing final electricity prices and now concentrates on monitoring network tariffs.

A major concern in the functioning of the Swedish market is related to the ex-post regulation, which is considered weak and insufficient to avoid cross-subsidies between supply and distribution.

With respect to end-users, the Swedish Consumer Agency has identified the following major problems related to market liberalization:[35]

- Problems with switching supplier, including delays, double invoices or in some cases none at all;
- Communication problems between the network company and the supplier,

[34] ARN, March 2002.
[35] Swedish Consumer Agency, March 2002.

for instance with respect to reporting meter readings;

- Problems when consumers change their residence and fail to advise their supplier;
- Problems when companies present their prices and services in ways that make them difficult to compare;
- Companies that do not give correct information about prices and contractual terms.

The Electricity Market Act (1998) created an obligation for the system operator to connect all consumers seeking access to the grid. Electricity suppliers operate under similar obligations. In every region there is a supplier who must offer electricity supply to all consumers at a price regulated by the National Energy Administration. Electricity consumers without a supplier are to be assigned a supplier by the network operator.

More specific provisions concerning consumer protection and consumer obligations are found in Chapter 11 of the Electricity Market Act. They comprise:

- Contractual terms, which disadvantage consumers relative to the provisions of Chapter 11 are invalid;
- Electricity supply may be interrupted if a consumer neglects his obligations and the neglect constitutes a substantial breach of contract. Before the interruption consumers must be requested to rectify the fault within a reasonable time;
- Consumers are granted a three-week grace period for payments before the supplier is entitled to stop supplying them. If a consumer does not or cannot pay, the municipal welfare board is informed. In certain cases, the welfare board will take over the payments for the consumer;
- Owners of network concessions and power suppliers are entitled to reasonable compensation from consumer for the costs incurred by the latter's breach of contract;
- If the supply is interrupted for reasons which are not attributable to the consumer, the latter has the right to compensation, unless the distributor can

prove that the interruption did not result from any fault of their own;

- Compensation for damages may includes compensation for costs incurred, loss of revenues and other losses caused by the interruption. If the damages are considered unreasonably burdensome given the economic situation of the person liable to pay compensation, it may be reduced. Insurance policies and foreseeability are taken into consideration;
- The consumer must make a claim within two years of when the damage was incurred. Failure to do so will annul his right to compensation.

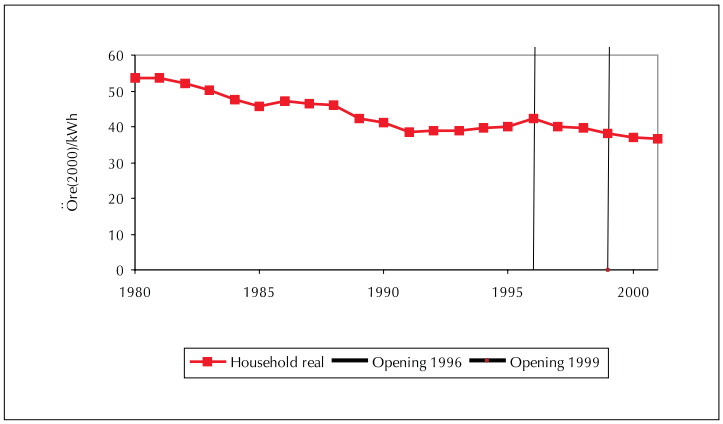
The Action Plan for Consumer Policy (2001) proposed the creation of a Consumer Advice Bureau for Electricity. In May 2002, the latter began operating in Stockholm.

In addition, the Action Plan provides for the Swedish Consumer Agency to perform systematic studies of deregulated and regulated markets from a consumer perspective in co-operation with the Swedish Competition Authority and various sector authorities.

5. Development of Household Electricity Prices

Real electricity prices for households dropped consistently throughout the 1980s in Sweden, resulting in a 28 % drop between 1980 and 1991. Following a brief increase in the first half of the 1990s, prices have resumed their downward trend (see Figure 15).

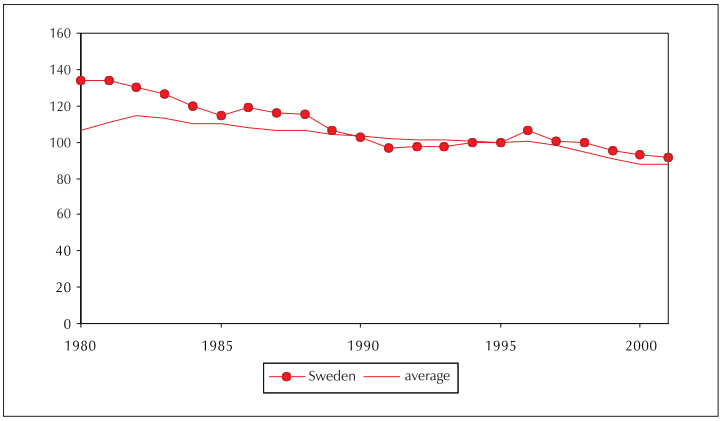
Figure 15: Real Electricity Prices for Households in Sweden; 1980 - 2001; Öre/kWh



Source: Own calculations of EWI, data taken from IEA.

Sweden experienced much stronger price reductions in the 1980s compared to the EU average, though the trends in the 1990s have more closely resembled those of the other countries (see Figure 16).

Figure 16: Household Real Electricity Prices Index in Sweden and EU; 1980 - 2001; 1995 = 100



Source: Own calculation of EWI, data taken from IEA.

APPENDIX 2: PROTECTION OF CONSUMERS OF ELECTRICITY IN FINLAND

1. Development of Consumer Protection

As in Sweden, active consumer protection policy began very early in Finland. In 1962, the Council of State appointed a Consultative Board for Consumers, the first body actually responsible for managing consumer issues in the central administration. In 1973, the National Board of Trade and Consumer Affairs was founded. Its main responsibilities were overseeing prices, competition, and consumer affairs. The Consumer Protection Act was enacted in 1978. The Act concerns offers and contracts for sale and marketing of consumer goods and services. The main issues covered by the Act are regulation of marketing and contract terms, sale of consumer goods, liability for defective goods, door-to-door selling and distance selling, and consumer credits. In each of these sections specific compensation schemes or rights to withhold payments are described.

In the 1990s, consumer policy gained further importance. Two Consumer Policy Programs were developed. A third Programme for the period 2000-2003 was completed in 2000. It was drawn up by the Advisory Council on Consumer Affairs[36] acting in conjunction with the Ministry of Trade and Industry.

According to the third Consumer Policy Program, the Finnish consumer protection policy is supposed to strengthen citizens' position in the society and the product markets, to ensure the stability of market conditions from the economic and sanitary point of view, and safeguard Finnish citizen's right to make informed consumer choices. A further aim of the consumer policy is to avoid and settle disputes arising between consumers and suppliers.

Currently, the most important legal provisions for consumer protection are found in

[36] The Chairman of the Council is the Minister in charge of Consumer Affairs. The Vice-Chairman is the Minister of Justice.

the Consumer Protection Act, the Product Safety Act and the Product Liability Act, of which the latter explicitly refer to electricity.

2. Institutions for Consumer Protection

In 1978 new institutions for consumer protection in Finland were founded: The Consumer Ombudsman, the Market Court, the Consumer Complaint Board and the Municipal Consumer Counselling Scheme. In 1990, the National Board of Trade and Consumer Affairs was replaced by three agencies: the National Consumer Administration, the National Consumer Research Centre, and the National Food Administration.

These offices are assisted by the local Provincial Administrative Boards.

In 1994 the revision of the Consumer Protection Act took effect, while in October 1995 the Ministry of Trade and Industry assigned a working group to draft a report on how consumer administration supervised by the Ministry could be re-organized as Finland's membership in the EU involved new challenges. Following the report, a new institutional structure of consumer protection was implemented in 1996. Again, in 1999 a re-organisation took place and the National Consumer Administration and the Consumer Ombudsman were combined into one Consumer Agency, with the Ombudsman serving as a Director General.

Currently, the primary Finish institutions that deal with consumer protection issues are: the Ministry of Trade and Industry, the Consumer Agency and the Consumer Ombudsman, the Consumer Complaint Board, the National Consumer Research Centre, and the New Market Court.

Traditionally, *the Ministry of Trade and Industry* has led the development of consumer protection policies. In 1993 and 1994, the general administration of consumer affairs in the Ministry was re-organized. Since then, the Competition, Consumer and Food Policy Division of the Trade Department is responsible for developing relevant consumer protection legislation in collaboration with the Ministry of Justice.

The Consumer Agency and the Consumer Ombudsman promotes the legal and economic position of consumers and implements the consumer policy. It is responsible for

supervising product safety, disseminating consumer information, carrying out consumer education and operating the municipal consumer counseling service.

The Consumer Ombudsman supervises marketing aimed at consumers and the contract terms used by businesses. He has also been assigned supervising tasks in the creation of other legislation such as the Electricity Market Act. The Consumer Ombudsman can also conduct negotiations with businesses, impose injunctions and conditional fines, bring matters to the attention of the Market Court, and report matters to the public prosecutor. The Consumer Ombudsman can assist individuals when it is considered to be important for the application of a law or for the good of the public. Since 1999, the Consumer Agency has been able to pay all the legal costs incurred by consumers in specific cases. This ensures that test cases can be brought to trial and legal precedents set.

The Consumer Complaint Board recommends settlements of complaints made by consumers with regard to the quality of products or services that they have contracted for. It also submits expert opinions to the courts on disputes relating to consumer goods. It differs from the other consumer authorities in that its purpose is not to promote the direct benefits of consumers.

The National Consumer Research Centre operates under the supervision of the Ministry of Trade and Industry and is responsible for conducting objective research relating to domestic consumption and consumables. Its primary duty is to produce and disseminate research data that can be used to enhance the well-being of consumers and households and strengthen their influence and decision-making. Other aims include improving co-operation between consumers and different branches of the economy, supporting the development of user-oriented technologies, promoting sustainable economic development, and improving national competitiveness.

The Market Court acts as a specialized court for any matters falling under it by virtue of the Consumer Protection Act in the field of marketing and contractual regulation or under the Unfair Business Practices Act. Created in March 2002, it was later merged with the National Competition Council. As such, the Market Court also promotes initiatives made by the Finnish Competition Authority to remove barriers to competition. It also serves as the first court of appeal for decisions of the Finnish Competition

Authority.

In addition to these national bodies dealing with consumer protection, there are *regional and local authorities*. As of 1992, all municipalities had to organize Municipal Consumer Counseling Offices in their territories. At the end of 2000, there were 153 consumer counseling districts and 182 municipal advisors in the field of consumer affairs employed in 160 offices. Approximately 37% of the counselors worked on full-time, and the rest are part-timers.

However, not all citizens have the same access to consumer advice as some municipalities have a full-time advisor, while others have an official who performs this task in addition to other duties, or share an advisor with neighboring municipalities. At present, approximately 80% of the population lives in municipalities which have full-time advisors. Roughly two-thirds of these have relatively easy access to the advisor. But even in some of these municipalities service is considered deficient because resources are not in line with demand. In the worst position are those who live in municipalities where advice is arranged only pro forma: the advisor has other duties to perform and lacks the necessary skills to handle the job, and information on service is inadequate.

Finland's municipal consumer counselors handle approximately 100,000 contacts a year. Two-thirds of these typically concern private disputes for which the consumer counselors provide a mediation service. The remainder are general inquiries about consumer goods. Municipal consumer counseling thus plays an important role in ensuring the protection of consumers' rights in Finland.

In addition to these government-run consumer organizations, there are two major *voluntary consumer associations* in Finland: the Finnish Consumers' Association and the Local Consumer Association. Both organizations receive some government funding.

The Finnish Consumers' Association is an independent promoter of the interests and rights of consumers. Its functions include the protection of consumer interests, local and regional consumer activities, consumer education, production and dissemination of information, as well as national and international co-operation. It reinvented itself in 1990 as a national umbrella organization, with seven national groups and sixty-two

local ones. It is represented in many international organizations and bodies, including the European Consumer Organization (BEUC) and the Nordic Advisory Council on Consumer Affairs.

The objectives of the Finnish Consumers' Association are:

- To encourage consumers to work actively for their interests and to promote their co-operation;
- To promote and advance consumer interests in society and on the market by means of informal action;
- To further the principles of fairness and sustainable consumption;
- To promote consumer awareness;
- To work for environmental protection.

The Local Consumer Association was founded in 1965 and has 750 individual members and 7 collective members. It also produces information, organizes campaigns, and delivers public statements.

Finnish consumer organizations are represented on all the major committees responsible for consumer affairs, such as the Consumer Affairs Commission, the Product Safety Commission, the Foodstuffs Commission, the Consumers' Standardization Commission. They are also often represented on preparatory bodies, committees, commissions and working groups responsible for consumer policy or consumer protection. The consumer organizations' views on major legislative projects are regularly elicited. Parliament also consults representatives of consumer organizations when examining the Consumer Policy implications of important bills.

3. Electricity Specific Consumer Protection

The Finnish electricity market was opened by virtue of the Electricity Market Act (1995). The major provisions of this Act include:

- A gradual opening of the electricity market with customers whose power requirements exceeded 500 kW being the first to have access in 1995, while the total market opening was delayed until 1997;

- Introduction of regulated TPA based on a case-by-case ex-post price control;
- Creation of an electricity exchange (EL-EX), which was later incorporated in the Scandinavian electricity exchange Nord Pool (1997);
- Establishment of licensed areas for distribution without exclusive supply rights;
- Accounting unbundling of generation, wires business and supply;
- Introduction of an electricity market regulator;
- Establishment of Fingrid as a Finnish transmission network operator, which started operations on September 1, 1997.

In 1998, the Electricity Market Act was amended to include the load curve profiling method for small customers. Because of the hourly metering requirement, no household changed initially its supplier. With the introduction of load profiling, which took effect for households towards the end of 1998, prohibitive metering costs for a change of the supplier were abolished. In 1999, a further amendment to the Electricity Market Act included specific provisions concerning the protection of small consumers.

Since being amended in 1999, the current Electricity Market Act includes several specific provisions for consumer protection:

- Electricity supply prices and terms must be public and easily accessible to consumers;
- An electricity retailer who is in a dominant market position in the geographical area of responsibility of a distribution network operator is obliged to supply at a reasonable price (standard service offer);
- The price for the standard service offer is supervised by the regulator;
- The Energy Market Authority serves as the first source for appeals for electricity disputes;
- The Consumer Ombudsman supervises the legality of the terms of the contracts on the electricity market;[37]

[37] In the beginning of the market opening for households in 1998, the Consumer Ombudsman intervened in advertising of electricity to consumers. The price information in special offers, in particular, had been unclear; no clear information had been given on electricity transmission prices and the comparisons of potential savings had been inadequate. Also in 1998, the Consumer Ombudsman intervened in case of two electricity companies that charged a fee for reading electricity meters when customers moved house. The Ombudsman found the rate given in the price list to constitute unreasonable contract terms.

- A distribution network operator may not terminate a connection contract or a consumer's power network contract;
- Specific periods of notice: the notice period for terminating an electricity sales contract is two weeks for the user of electricity and three months for the retailer;
- Distributors must provide itemized invoices to their customers;
- Consumers have a right to withhold payments as compensation for damages caused by delayed connections to the network;
- Consumers are entitled to price reductions in case of low quality of electricity supply. In case supply disruptions, minimum compensation is equivalent to two weeks share of the annual network service fee;
- Entitlement to compensation payments for damages suffered because of a fault in electricity supply;
- If a retailer fails to deliver the distribution network operator must notify the consumer and continue to deliver for at least three weeks after sending the notification;
- Supplier has the right to disconnect a consumer for failure to pay invoices (or other breaches of contract) according to contractual terms.

Before interrupting the electricity supply the company must send the consumer a written notification of the default on payment or of the breach of contract and a separate warning preceding the interruption of the electricity supply. The latter may only be sent two weeks after the initial notification is sent. The electricity supply may then in turn be cut at the earliest five weeks after the payment has fallen due or after the consumer has been informed of some other breach of contract for the first time.

If the default on payment is caused by consumer's financial difficulties that are the result of serious illness, unemployment, or some other cause for which he is not at fault, electricity supply may be cut at the earliest two months after the due date of the payment.

Electricity supply may not be cut because of default on payment between the beginning of October and the end of April in a building or in a part of a building that is used as a permanent residence, if the building is heated by means of electricity, until four months have elapsed since the due date of the outstanding payment.

Since the electricity market opening for households, the Market Court intervened in two prominent cases.

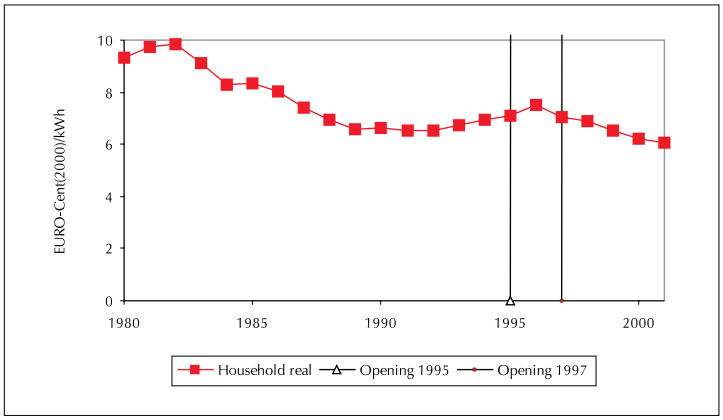
In 1999, with the opening of the electricity market to competition, companies tried to attract consumer attention with environmental claims. The Consumer Ombudsman studied ads placed by Kainuu Electricity, which appeal strongly to consumer concern for the environment and the welfare of future generations. Helsinki Energy has claimed in its ads that the electricity, which it markets, helps to keep the air cleaner. According to the Consumer Ombudsman's guidelines on environmental marketing, environmental claims should be accurate and the impact of individual consumers' decisions on the environment should not be exaggerated. The Market Court prohibited the two companies, under threat of a fine, from giving the overall impression that by insulating houses in excess of official building standards, consumers can substantially promote environmental protection and slow down the greenhouse effect. They also prohibited the companies from using marketing phrases such as "insulate before the last pine needles fall".

In November 1999, the Market Court held that electricity cannot be advertised with side benefits. The Market Court banned Helsinki Energy from using side benefits and discounts on petrol and home insurance in its advertising. The Market Court noted that the purpose of deregulating the electricity market was to allow customers to benefit from cheaper prices as a result of competition. Comparing prices should not be made more difficult by linking side benefits to electricity agreements.

4. Development of Household Electricity Prices

Finland experienced a strong reduction in real household electricity prices during the 1980s. During the 1990s prices increased, peaked in 1996 and resumed their downward trend afterwards (Figure 17).

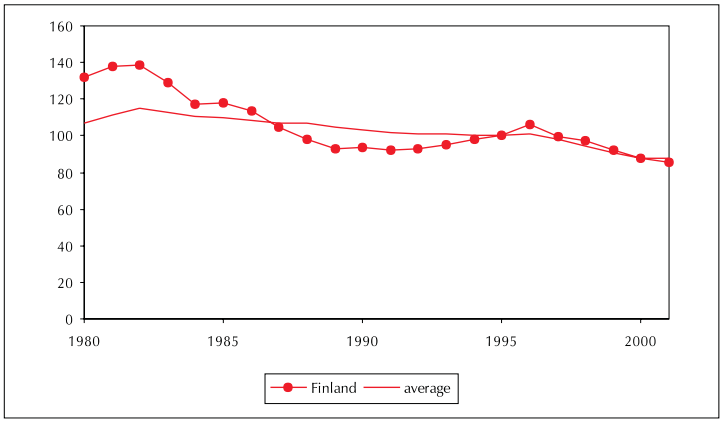
Figure 17: Real Electricity Prices for Households in Finland; 1980 - 2001; Euro-Cent/kWh



Source: Own calculation of EWI, data taken from IEA.

Compared to other European countries household electricity prices were more volatile in Finland. They fell much faster in the 1980s, but increased in the early 1990s, when they were falling in most other countries. After liberalization they decreased somewhat faster than the average (Figure 18).

Figure 18: Household Real Electricity Prices Index in Finland and the EU; 1980 - 2001; 1995 = 100



Source: Own calculation of EWI, data taken from IEA.

APPENDIX 3: PROTECTION OF CONSUMERS OF ELECTRICITY IN GERMANY

1. Development of Consumer Protection

Since the late 1950s, German consumer protection policy has relied predominantly on the existence of competition. The two primary pieces of legislation that govern the sector are the General Competition Law and the Law Against Unfair Competition. The former provides cartel authorities and the ministers the authority to control the functioning of the markets. The aim of the latter is to protect competition, competitors, and the public against unfair competition. It provides general binding rules on competitors' behavior.

Since the 1970s, consumer information has been considered another means of consumer protection.[38] In order to disseminate information the Ministries rely on predominantly publicly financed consumer associations, rather than on their own public relations departments.

In 2002, the government proposed a Consumer Information Act. It was designed to enable consumers to act in a sovereign matter in the marketplace and to protect their health and economic interests. According to the proposed law, selected public authorities were supposed to be required to provide information upon request concerning food and selected consumer goods (private companies were not concerned). The proposed law foresaw a special federal agent for the access to consumer information, to which any citizen may turn if he felt that the specific public authority is not acting according to its information requirements.

In May 2002, the German Upper House of Parliament (Bundesrat) rejected the proposed law, as the provisions would create unreasonable costs for the public bodies, which would mostly not be able to deliver the required information. In addition, the

[38] See Hippel, E. v., *Verbraucherschutz*, Tübingen, 1986 for more stakeholder statements concerning consumer protection in Germany in the 1970s.

Bundesrat criticized the national independent initiative, and proposed a EU-wide action.

2. Institutions for Consumer Protection

There are several different institutions for consumer protection in Germany:

- Institutions within the federal government,
- Consumer Agencies on state level,
- Private (umbrella) organisations for consumer protection.

Germany relies on cartel authorities at both federal and state levels to ensure the efficient functioning of competition because of its importance in ensuring the protection of consumers.

In the 1970s, Germany created *the Consumer Council* within the Ministry of Economy which was generally responsible for consumer protection in Germany. The crisis in 2001 in the food-sector as a result of BSE and foot-and-mouth disease led the government to replace the Council with a Ministry for Consumer Protection, Food and Agriculture. Although consumer protection lies within the responsibility of the new Ministry, health issues have recently dominated the agencies agenda. Since responsibility for consumer protection is shared by a variety of ministries, there is an inter-governmental committee as well as a Federal-State Committee on consumer affairs to assist them in coordinating their work and exchanging information.

At the state level, North Rhine-Westphalia and Bavaria have own ministries for consumer protection. In the other fourteen states the State Ministries of Economy are responsible for consumer protection. Each state also has a *consumer agency*. These are mostly financed by the relevant state governments. To a small extent their budget is also financed by fees for special advisory services or by selling information booklets. In some cases, local authorities co-finance the consumer agencies. "In economic terms consumer organizations act as a counterpart to commercial and industrial organizations supporting private consumers, so that they can act in the markets on an improved information basis and with strengthened consumer rights thus encouraging competition which may lead to better product and service quality at appropriate prices."[39] .

[39] Meinel, H., *Challenges and Choices of Liberalization for Consumer (and for Consumer Organizations)*, http://www.energiestiftung.de

Until November 2000 there were *two consumer umbrella organizations* at the federal level: the Union of Consumer Associations and the Consumer Protection Association.

The tasks of the Union of Consumer Associations were:

- To promote the rights and interests of consumers to the private sector and to legislative, administrative, and judicial bodies, both on a national and international level;
- To co-ordinate the activities of their members. These included the sixteen state consumer agencies as well as other specific consumer agencies, such as the German Tenant Association.

The task of the Consumer Protection Association was to undertake legal action against companies' unfair competition practices and deceptive advertisement, as well as against companies' general terms of trade (potential violations of the Law against Unfair Competition). Since 1976, the Association also had the right to act as legal adviser for consumers and as plaintiff in specific cases. However, it was not entitled to represent individual consumer complaints in the courts.

In November 2000, the Union of Consumer Associations, the Consumer Protection Association, and the Consumer Institute Foundation merged into the Federation of German Consumer Organisations. The latter is a non-profit and politically non-partisan organization with approximately eighty employees. It finances its work through funds from the Federal Ministry for Consumer Protection, Food and Agriculture as well as project funds from the European Commission, and earnings from the proceeds of publications, and project funds. The government's support for the Federation in 2002 amounted to €8.75 m.

The Federation of German Consumer Organisations is engaged in advocacy for consumer interests. It is the parent organisation of 35 consumer-oriented associations (16 state consumer agencies and 19 private consumer organisations). The objective of the Federation is to enforce transparency on production methods, features, and the quality of goods and services to establish precautionary consumer protection as a key political objective. Its mandate includes the following:

- To represent consumer interests in politics and economics;
- To co-ordinate the activities of member organisations related to consumer policy;
- To protect consumers by taking collective legal action;
- To promote consumer information to foster the highest standards for consumer counseling;
- To provide professional qualification for the staff of consumer organisations in a variety of fields.[40]

In addition, the Federation is an active member of the European Consumers Organization (BEUC). It is also represented in the International Council of Consumers, the global federation of consumer organizations.

3. Electricity Specific Consumer Protection

The German electricity market was opened on April 1, 1998 with the new Energy Industry Law. All consumers were granted a free choice of supplier at once. Households were not required to have hourly metering. Their consumption is determined based on load-profiles. Access to the network is based on a negotiated third-party access (TPA).

The Energy Industry Law contains only general provision for consumer protection. Its aim is to lead to a secure, reasonably priced and environmentally sustainable electricity (and gas) supply.

A license is required for the supply of electricity. Licenses are not granted if the new supply will lead to less favorable conditions in electricity supply.

Integrated distribution and supply companies have a general obligation to connect and supply. They have to publish general terms and tariffs, which will be applied to everyone seeking supply. The obligation is not applicable if it leads to unreasonable costs for the company. Thus, the integrated distribution and supply company (the former monopoly supplier) acts as supplier of last resort.[41]

[40] These fields include advertising, agricultural policy, building & housing, care, competition, e-commerce, energy, environment, ethical consumption, financial services, food safety, health policy, indebtedness, insurance, international trade, investment, leisure time, new media, nutrition, old age provision, post, product description, product safety, retail, sustainable consumption, telecommunications, tourism, transport, water.

[41] Currently it is unclear what will happen if distribution and supply functions will be corporately unbundled and there is no “area-supplier” left.

The government may (via ordinance) prescribe suppliers' general terms and conditions and tariffs or make them on the basis of governmental authorization. This has been done in the case of the Federal Tariff Regulating Electricity. In addition, the government may release general terms of trade for electricity companies supplying consumers at general tariffs.

Obviously, there are few direct instruments encoded in the German Energy Industry Law. In accordance with the general attitude towards consumer protection, the effective functioning of the market is considered to be one of the most important aspects of consumer protection.

Currently, the access to the grid is based on a negotiated TPA. Whereas in general this means that network access can be negotiated individually, several stakeholder associations[42] have agreed upon a general (legally non-binding) agreement for network access and the calculation of network fees[43] . Consumer associations, though not officially signatories of the Association Agreement, took part in the negotiations.

With the negotiated TPA system, there is currently no sector-specific regulator in Germany. Regulatory oversight is undertaken by the general Federal and State competition authorities. Nevertheless, there is a special task force within the Ministry of Economy which closely follows developments in the liberalized electricity market.

Before liberalization, the government had released an ordinance concerning General Terms of Trades for the Supply of Electricity to Tariff Customers, which made these terms part of every contract between a monopolistic supplier and a tariff consumer. With the enactment of Energy Industry Law, the government did not change the general terms after liberalization. Even though the latter contain certain provision with respect to consumer protection, their origin stems from pre-liberalization conditions. The general terms are sometimes considered unfavorable (with respect to liabilities, period of notice, etc.) compared to the general terms which apply to non-tariff customers.

In the first years after liberalization households willing to switch supplier encountered a variety of problems. These problems included threatened or actual refusal of access to the local grid for new customers, non-existent or unfair contractual terms for new customers, lack of public announcements regarding whether and when the change in

[42] The original Association Agreement (Verbändevereinbarung I) was signed in December 1998 and has been amended twice since (Verbändevereinbarung II from December 1999 and the current Verbändevereinbarung II + from December 2001

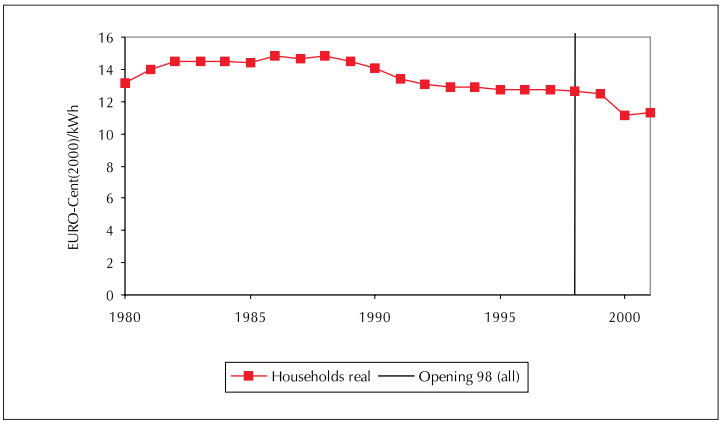
[43] Verbändevereinbarung II + from December 2001.

supply would happen, flopping new sellers (who may have been paid a deposit or a first rate already), ending with threats to cut off the electricity supply to those consumers wishing to change suppliers. To address these issues, the Ministry of Economy set up a telephone service for customers that seek information on switching their suppliers. In addition, in 2002 the Ministry published best-practice regulations concerning the exchange of information between suppliers and network operators in case of customers switching suppliers.

4. Development of Household Electricity Prices

In Germany, real household electricity prices increased slightly during the early and mid-1980s. During the late 1980s and the early 1990s, the prices decreased and remained almost stable until 1998, after which they initially fell sharply but rose again in 2000 (Figure 19).

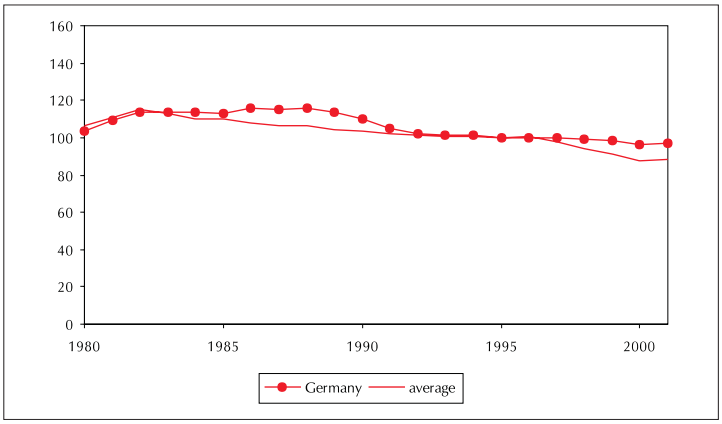
Figure 19: Real electricity prices for households in Germany; 1980 - 2001; Euro-Cent/kWh



Source: Own calculation of EWI, data taken from IEA.

Compared to other countries household electricity prices were above average in the mid-1980s. After liberalization they did not decrease as much as the average (Figure 20).

Figure 20: Household Real Electricity Prices Index in Germany and the EU; 1980 - 2001; 1995 = 100



Source: Own calculation of EWI, data taken from IEA

APPENDIX 4: PROTECTION OF CONSUMERS OF ELECTRICITY IN THE UNITED KINGDOM

1. Development of Consumer Protection

In the early 1960s, a central consumer protection agency as well as local consumer advice services were created in the UK. Based on a government Commission's report from 1962 ("Molony Report"), a Ministerial department for "Consumer Affairs" within the Department of Trade and Industry (DTI) was founded. In 1973, the Fair Trading Act called for a Director General for Fair Trading as head of the Office of Fair Trading (OFT). He is responsible for supervising competition laws as well as for protecting consumer against unfair competition. Between 1974 and 1979 a separate ministry for consumer protection (Department of Prices and Consumer Protection) was created. During the 1980, more specific laws in the context of consumer protection were released, e.g. the Consumer Protection Act in 1987, which dealt mostly with product safety, liabilities for damage caused by defective products, and misleading price information.

In 1999, the UK government published a white paper "Modern Markets: Confident Consumers", which set the framework for consumer protection policy for the 21st century. Major proposals in the White Paper include:

- A hallmark for consumers to identify at a glance those companies that have signed up to a code of practice which guarantees high standards of customer service, including proper redress for complaints and which have received the Office of Fair Trading's (OFT's) seal of approval;
- The publication of international price comparisons;
- New powers for trading standards officers and the OFT to stop traders defrauding the public;

- New powers for the courts to ban from trading those who repeatedly cheat consumers;
- The development of a new advice network, building on existing advice agencies, to give people easier access to a high quality resource;
- A consumer gateway on the Internet and a trial local consumer help-line which will direct people to the best sources of advice;
- New measures to ensure information is accurate, comprehensive, and easy to understand, including clearer prices and tougher controls on inaccurate descriptions of services;
- A rolling review of all consumer protection legislation to see whether it is still effective in meeting the needs of consumers or whether it has become a burden on business with no apparent benefit;
- The re-launch of the National Consumer Council as a dynamic and effective voice for consumers;
- A full review by the Director General of Fair Trading of his consumer protection functions.

The White Paper stresses the idea of fair competition to provide consumers with appropriate consumer protection. "*In the Consumer White Paper, the government reiterated its belief that effective codes of practice will benefit consumers and business alike. DTI has been working with the OFT to develop a scheme that will give approval to codes of practice that put core principles into effect. This will help consumers recognize a good code and make it easier to find a reliable business.*"[44].

2. Institutions for Consumer Protection

There are several governmental and non-governmental institutions in the UK responsible for consumer protection. The most important include the UK government ministries, the Office of Fair Trading, National Consumer Council, National Association of Citizens Advice Bureaux, and local Trading Standards Departments[45].

In the United Kingdom individual *governmental departments and agencies* are

[44] OECD, UK - Annual Report on Consumer Issues 2000, Paris.
[45] The Citizens Advice Bureaux and the Trading Standards Department form the Consumer Support Networks on a local level.

responsible for the protection of consumers in areas in which they have expertise as policy makers.[46] The HM Treasury for example has overall responsibility for the protection of consumer interests relating to the provision of banking, insurance, pensions, and other financial services, while the Department of Health is responsible for consumer protection in the field of public health. The Home Office is responsible for consumer protection in the field of fire safety. The Department of Environment, Transport and the Regions is responsible for consumer protection in such areas as road, aviation and shipping safety, public transport safety, and building construction standards.

Policy responsibility for general legislation on consumer product safety and consumer rights in the sale of goods and services falls to the *Department of Trade in Industry* (DTI). Within the DTI, the *Consumer Affairs Directorate* takes the lead within the Government on consumer policy and helps formulate new consumer legislation in the UK.

In April 2002, the Consumer Affairs Directorate was merged with the Competition Policy Directorate into the *Consumer and Competition Policy Directorate*. The Directorate's main job is to deal with UK and international consumer and competition policy issues.

Individual company and consumer enquiries are not dealt with at the Consumer and Competition Policy Directorate but are referred to the Office of Fair Trading.

The Office of Fair Trading plays a major role in protecting the economic welfare of consumers and in enforcing UK competition policy. It is a non-ministerial Government Department whose main objective is to promote the economic interests of consumers. Its Consumer Affairs Division seeks:

- To keep the market for goods and services under review and identify potential problem areas for further investigation;
- To empower consumers through information and advice;
- To promote high standards of consumer protection;
- To tackle trading malpractices through regulatory action for example.

There are also other non-ministerial governmental services which deal with the privatized utility industries. These include for instance, the energy markets regulator OFGEM.

[46] The different responsibilities are not exercised jointly except to the extent that, where more than one Department has an interest in a consumer policy issue, the Department with the majority interest and expertise will lead and co-ordinate policy.

The National Consumer Council is an independent, non-departmental public body set up by the UK government in 1975. A large part of the Council's funding is grant aid from the DTI. The Council's mandate is to promote action for furthering and safeguarding the interests of consumers, to ensure that those who take decisions which will affect consumers have a balanced and authoritative view of the interests of consumers before them, and to insist that the interests of all consumers, including the inarticulate and disadvantaged, are taken into account. Special emphasis is placed on disadvantaged consumers as well as on industry sectors, which are not open to competition. However, the National Consumer Council does not deal with the electricity sector, as this has been undertaken by the sector specific Electricity Consumer Council until 2000.[47] Since then, *Energywatch* is acting as consumer agency in the field of electricity and gas.

The Citizens Advice Bureau Service (CAB) offers free, confidential, impartial, and independent advice. Currently, there are 2,000 CAB outlets in England, Wales, and Northern Ireland. Each CAB is an independent charity, relying on funding from local authorities, the private sector, charitable trusts and individual donations. Each bureau belongs to the National Association of Citizens Advice Bureaux, which sets standards for advice, training, equal opportunities, and accessibility. The National Association also co-ordinates national social policy, media, publicity, and parliamentary work.

The Local Trading Standards Department is represented by the Trading Standards Institute, and based on a membership organization. It provides services and support for its members, and makes submissions relating to national and international legislation that concern consumer affairs.

Further consumer protection institutions in the UK include the Consumer Congress, the National Federation of Consumer Groups, the Consumers in Europe Group, as well as the Consumers' Association.

3. Electricity Specific Consumer Protection

The electricity market in the UK was liberalized with the introduction of the Electricity Act of 1989. Major provision, which came into force in April 1990 include:

- The separation of the Central Electricity Generating Board into three generators (National Power, PowerGen and Nuclear Electric), and a transmission

[47] In the 1960s and 1970s, National Industry Consumer Councils (e.g., in the electricity, gas, water, and telecommunications sector) were founded. These specialised in consumer issues within their specific industry.

company (National Grid Company), and for the privatization of these companies;

- Privatization of the twelve Regional Area Boards, responsible for distribution and supply, and formation of twelve Regional Electricity Companies;
- Implementation of a mandatory wholesale electricity pool;
- Incremental market opening: as of April 1, 1990 customers with more than 1 MW demand became eligible, as of April 1, 1994 customers with more than 100 kW of demand, and from April 1st, 1998 all customers were allowed to freely choose their supplier;
- Introduction of the Office of Electricity Regulation as an independent sector specific regulator.

In June 1999, the electricity market regulator and the gas market regulator were merged into the Office of Gas and Electricity Markets (OFGEM). The principal objective of OFGEM is to protect the interest of consumers, wherever appropriate by promoting effective competition.

Due to criticism of the old pool system,[48] New Electricity Trading Arrangements (NETA) were introduced in the UK based on the Utilities Act 2000. The Arrangements began functioning on March 27, 2001.

Major elements of New Electricity Trading Arrangements include:

- Introduction of trading based on bilateral contracts between generators, suppliers, traders and customers;
- Abolishment of the central dispatch through the pool run by the National Grid Company and introduction of decentralized dispatch through generators;
- A new balancing mechanism as a core element of the Arrangements;
- Forwards and futures in order to hedge against price risks may be traded bilaterally.

With the Utilities Act (2000) changes towards consumer protection in the electricity market took place. The Act, which was the legal basis for the New Electricity Trading

[48] Criticisms focused on price manipulations, the lack of demand-side participation, and the difficulties of changing the pool rules due to "institutional inertia".

Arrangements, introduced the legal unbundling of distribution and supply. For each function a separate license is now required. With respect to consumer protection, the most important provisions from the Electricity Act (1989) and the Utilities Act that apply to the electricity market include:

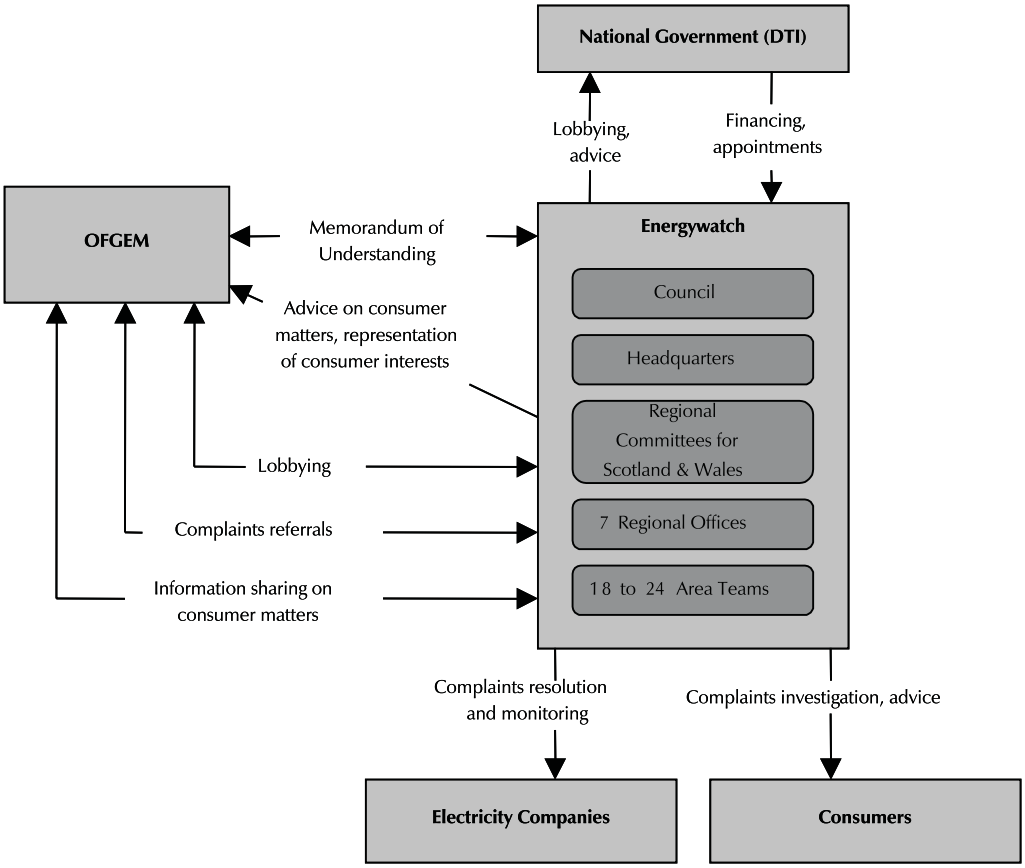
- An obligation to connect for the distribution network company;
- A requirement for suppliers to supply domestic customers on request (subject to certain exceptions) and to offer a "standard contract";
- A requirement to publish prices, and to provide a range of payment methods, including cash and other credit terms;
- A requirement for licensed suppliers to provide and publish codes of practice and customer service codes. OFGEM has to approve the codes of practice, and the suppliers have to consult with Energywatch prior to seeking regulatory approval. The codes have to lay down rules concerning:[49]
  - payment methods for customers,
  - treatment of customers in debt,
  - treatment of customers with specific needs (elderly, disabled or chronically sick customers). The services that have to be offered to these customer groups include special passwords, meter repositioning, etc.),
  - providing advice concerning energy efficiency;
- Introduction of minimum service quality standards for distribution companies (standards of performance) and amended incentive regulations: OFGEM has defined certain minimum standards for the number and duration of supply interruptions, as well as the quality of telephone advice to customers. Those distributors who exceed the standards receive bonuses, while those who fail to meet the minimum standards are penalized;
- Consumers' right to compensation payments in case of several supply interruptions per year[50];
- Foundation of Energywatch as the new gas and electricity consumer council.

[49] These license modifications were introduced by OFGEM according to its Social Action Plan 2000

[50] If the supply is interrupted four times in one year, for a period of longer than three hours each time, consumers have the right to receive a compensation of £ 50.

With the privatization of the electricity sector in 1990, the Electricity Consumers' Committee was introduced. With the Utilities Act, the Electricity Consumers' Committee and the Gas Consumers' Committee were dissolved and Energywatch as a joint consumer organization of the electricity and gas sector was founded. Energywatch is a non-government body, independent of the government, of the regulator OFGEM, and of industry interests (Figure 21). Energywatch is financed by license fees paid by distributors and suppliers.[51]

Figure 21: Structure of Consumer Representation in the Energy Sector



Source : Simmonds, G,: Consumer presentation in Europe policy and practice for utilities and network industries, Part I: Consumer Representation in the UK, Centre for the Study of Regulated Industries, Research Report 11, Bath, January, 2002

[51] Ultimately, these fees will be passed on to the final customers.

Energywatch represents the interest of all consumers, specifically (but not exclusively) individuals who are disabled or chronically sick, those over 65 years of age, with low incomes, or who reside in rural areas. More specifically, Energywatch's major tasks include:

- Ensuring the fair and effective functioning of the competitive market;
- Representing consumers' interests towards public authorities, licensees, etc.;
- Providing information to gas and electricity consumers;
- Serving as a central organisation, to which consumer may turn in order to seek information, launch a complaint, or resolve a complaint that was not dealt with to their satisfaction by the relevant licensee.

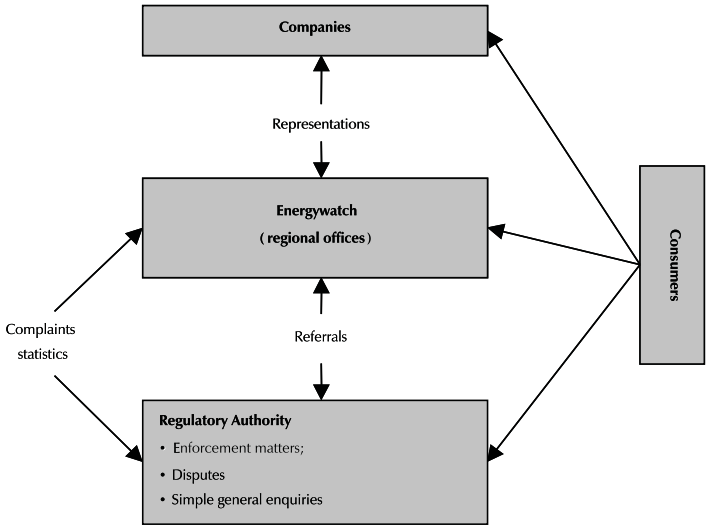
Energywatch is headquartered in London, has seven regional offices across Great Britain, and supports up to twenty-four local area teams. The latter are encouraged to work closely with the local, non-electricity specific consumer agencies such as the Consumer Advice Bureaux.

Although Energywatch is independent of the regulator, the Utilities Act grants both institutions certain authorities with respect to consumer protection. In a Memorandum of Understanding[52], OFGEM and Energywatch agreed to share specific information necessary to enable both to carry their respective functions. They also agreed to work together on complaints management, the alleviation of fuel poverty, as well as the improvement of quality of services.

The Utilities Act 2000 only provided a general framework for handling complaints, and left the detailed procedures to Energywatch. Figure 22 shows the procedural framework for handling complaints in the electricity sector. Complaints submitted to Energywatch are dealt with by the relevant regional office. Complaints received by OFGEM will in most cases be referred to Energywatch. If Energywatch is unable to resolve a complaint about matters for which OFGEM has powers, it will formally refer the case to OFGEM.

[52] OFGEM, Memorandum of Understanding, The Gas and Electricity Markets Authority and the Gas and Electricity Consumer Council, November, 2000

Figure 22: Procedural Framework for Complaints Handling



Source : Simmonds, G,: Consumer presentation in Europe policy and practice for utilities and network industries, Part I: Consumer Representation in the UK, Centre for the Study of Regulated Industries, Research Report 11, Bath, January, 2002

Energywatch cannot compel companies to resolve individual complaints, as these rights have remained with OFGEM. Some authors see this lack of authority as a major weakness of the system. Energywatch itself relies on the deterrence effect caused by the negative publicity due to their ability to publicize the poor performance of a supplier or distributor.

In 2001, Energywatch received over 85,000 gas and electricity complaints, representing an increase of over than 3% from the year before[53]. In its forecast for 2002-2003, Energywatch hopes to resolve 75% of complaints within 35 working days and 95% of complaints within 66 working days.

In March 2000, OFGEM promulgated a Social Action Plan[54]. Based on this Plan, the DTI launched a nation-wide campaign to fight fuel poverty in November 2001.

Households in the UK are defined as fuel poor if they have to use more than 10% of their disposable income for energy. The number of fuel poor households has been reduced from 5.5 million in 1996 to 4 million in 2000. Two thirds of the reduction can be attributed to lower electricity prices. The goal of the UK government is to end fuel

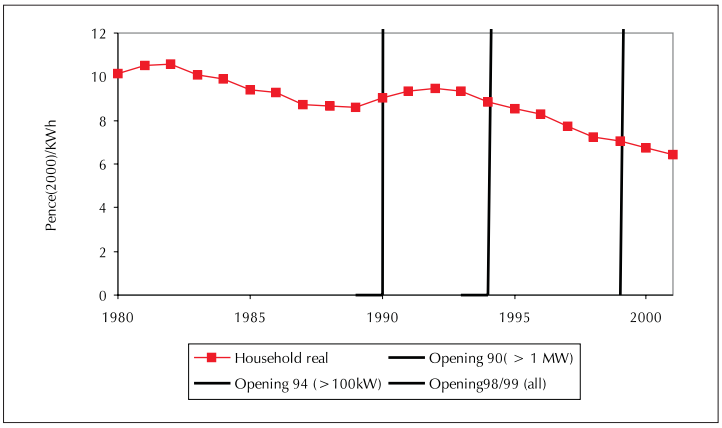
[53] Energywatch, What we plan to do - Year 2, published by Energywatch, 2002.
[54] OFGEM, Social Action Plan 2000, March, 2000

poverty completely at least for vulnerable households by 2010. In order to achieve this target, a range of programmes and measures has been put in place. These mainly include programs to improve energy efficiency in fuel poor households and actions to maintain downward pressure on fuel bills, ensuring fair treatment for the indigent.[55]

4. Development of Household Electricity Prices

Real household electricity prices increased slightly in the early 1980s and fell by 19% between 1982 and 1989, one year before the liberalization. Prices rose by 10% from 1989 to 1992 and then fell continuously until 2001 (Figure 23). Real household prices in 2001 were about one third lower than in 1992. The average revenue figures show no acceleration in the price reduction after the opening of the market to small customers in 1999.

Figure 23: Real electricity prices for households in UK; 1980 - 2001, Euro-Cent/kWh

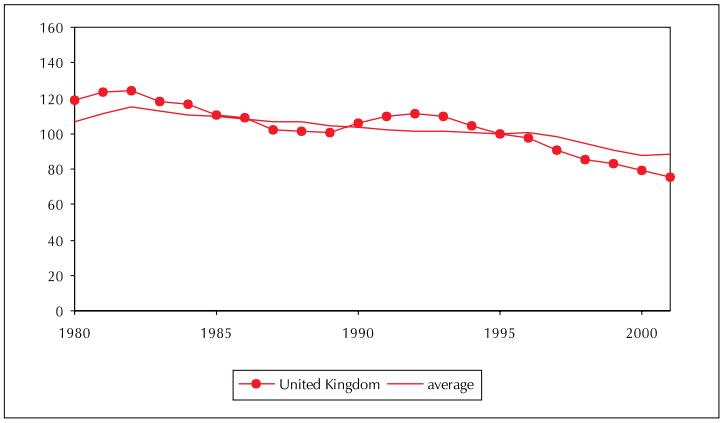


Source: own calculation of EWI, data taken from IEA.

In comparison to the European average, household prices in the UK fell faster during the 1980s and (after a brief increase from 1990 to 1992) during the period 1992 - 2001 (Figure 24).

[55] www.dti.gov.uk/energy/consumers/fuel_poverty/index.shtml

Figure 24: Household real electricity price index in UK and EU; 1980 - 2001; 1995 = 100



Source: own calculation of EWI, data taken from IEA

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REFORMS IN ELECTRICITY SECTOR AND THEIR IMPACT ON CONSUMER PROTECTION

Sofia, 2002

This publication presents the results of a research project on the impact of electricity reforms in Bulgaria on consumer protection implemented by the Center for Economic Development and the Institute of Energy Economics at the University of Cologne. The project is under the PHARE ACCESS Programme and is financially supported by the Delegation of the European Commission.

The study presents the status and perspectives of the three main factors for consumer protection - market competition, regulation of electricity supplies, and representation of consumer interests, and outlines the opportunities and threats to the social affordability of electricity sector reforms in Bulgaria. Special attention is paid to the requirements of the European Union and the practices in some Member States in the protection of electricity consumes.

The Center for Economic Development is a Bulgarian non-governmental think thank in the area of economic research, established in 1997. Its goal is to support the economic development of Bulgaria by promoting the public debate on economic issues and by developing economic policy options.

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The Institute of Energy Economics is an affiliate of the University of Cologne. Its main activities include education, research and consultancy in all areas of energy economics and energy policy.

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